IRAQI ARCHITECTURE BETWEEN TRADITION AND MODERNITY: RE-CREATING THE URBAN IDENTITY OF BASRA, THE "VENICE OF THE EAST"

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ABSTRACT

Unfortunately, in recent years Iraqi traditional architecture and urban identity have been deeply affected by three wars, which challenged the cultural memory of the local people and in particular of young generations. This research focuses on the city of Basra to investigate the material features of the Iraqi architecture and to develop guidelines to steer the maintenance of the architectural and urban identity.

Thanks to its long history, Basra is rich in cultural heritage. In particular, the numerous canals are a very specific feature, gaining to the city the nickname of "Venice of the East". However, the three big wars in Iraq -1980, 1991 and 2003- greatly affected the architectural identity of Basra. During these wars, the city was under attack from bombs and grenades every day and as a result of this, most of the heritage and architectural landmarks were lost. Following the last war, many developers carried out different projects in Basra adopting foreign and alien designs, which reflect their ideological culture, far from the city's spirit and not respectful of the local history and identity. The reconstruction of Basra has been put forward disregarding the identity of the city and threatening the authenticity of the urban landscape and the architectural identity.

This research adopted a mixed method strategy in order to identify the main features of the architectural identity in Basra city and to assess the threats to the traditional identity during the city development process. Following a survey and a set of semi-structured interviews, three neighbourhoods have been selected within the city, to offer examples of architectural typologies and urban morphologies from three different periods: Ottoman, British and contemporary. In addition to secondary data sources such as archival documents, an in-depth field study has been conducted for each of these neighbourhoods, including gathering observations from experts and local residents. Evidence from primary data collected shows that a lack of awareness among local people exists about the value of heritage and traditional architecture, especially among young people. Furthermore, there is a gap in the knowledge of what are the main features, which made the Iraqi architecture unique, as well as, there is a lack of instruments supporting local professionals and practitioners willing to preserve the local identity in architecture and urban design. Improving social awareness and understanding the traditional architecture's value of Basra is an essential route to create a cultural resilience facing the loss of the local identity. Failure to address the local knowledge also depends on a lack of documentation on the tangible heritage of the city. This raises a serious question about

what needs to be done to preserve the city identity and what strategy needs to be taken into consideration for the future of the city.

Based on the findings of the empirical study and the opinions of experts, a set of guidelines for preserving the future identity of Basra has been first developed and then validated through a focus group. The guidelines aim at supporting professionals, architects, planners and Iraqi's decision makers to maintaining the architectural identity. More in general, the guidelines offer a feasible example of an alternative, novel approach to steering the Iraqi architectural and urban future towards a different path, respectful of its extraordinary roots.

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Chapter 1: INTRODUCTION

1.1 Introduction

The issue of architectural identity has been a global concern for many nations, especially in the past century. Over the recent past decades, many cities started to lose their character, becoming more and more ambiguous. Identity is a combination of similarities and differences that creates a sense of uniqueness whereby individuals, groups, and societies identify with each other and distinguish themselves from others. It is dynamic, always defined in relation to others rather than in isolation (Abel, 1997). Identity is the foundation of a sense of belonging: it is the instrument by means of which people locate themselves as members of communities and groups and define their place in society (Adam, 2012). For this reason, architecture and urban form are a part of the greater phenomenon of identity and through them we can understand the impact that the modifications of buildings and places exert on communities.

Architectural identity can be a cultural instrument whereby people understand the progress of their social life from the past to the future. It is an educational evidence for the public, able to provide knowledge of the heritage and to enable reasoning on the current situation (Abel, 2000). The formation of the architectural identity can not be achieved in a way other than through historical collective interaction between many factors. To achieve the identity and privacy in the architecture of human societies, it represents the idea of the bind everything followed to achieve differentiation, particularly with respect to its past, present and future with its ties to the temporal and spatial (Al Ani, 2013). Temporal relations are extremely relevant to the both the privacy of the place and a sense of identity because they can be achieved acting time in architecture by translating temporal structures into spatial properties (Schulz, 1980).

Modernity is radicalised into change. It gradually becomes an aesthetics of change for the sake of change. Hence, change is the human intervention shifting the mores of cultural structure. (Heynen, 2000). Architecture, as a part of culture, is one of the objectives of this change. It has two types of changes, changes aimed at preservation and changes aimed at destruction: the first lead to the stability of the phenomena generated, whilst the latter try to generate new types of phenomena (Baper. 2010).

After the modern developments, it is not logical, as Rapoport (1999) says, to try to revive the traditional systems or, on the contrary, to seek a full change toward contemporary systems, because, in the first , originality will be lost, while in the second case, the result will be a vast loss for communities. Therefore, communities will remain in a constant hybrid state, composed, to different degrees, of traditional systems of the past and contemporary systems: for some aspects it will be very close to a traditional image whilst it will be closer to a modern image for some other aspects. Frampton (1987) mentioned critical self-consciousness, which involves individuals and groups who, borrowing from other cultures, will try to dismantle and then understand the new so as to adapt to it, according to their conceptualisation and their systemic values. This is a natural issue for communities that seek to conserve their identity. So, when searching for architectural identity, one may expect to find several overlapping identities.

1.2 The Research Background

Since the early decades of the 20th century, most countries of the Middle East have embraced modern architecture applying its solutions to their environment with little or no attention to the local architectural identity. The architectural identity of every country is a direct product, as well as a reflection, of a nation's political system (Nooraddin, 2012). During the times of the western colonisation in the Middle East, the colonial powers imposed their foreign traditions and culture to the colonies (Al-Sultany, 1982).

Through the 20th century, the colonial occupation, new technology, new building materials, a booming oil economy and a westernised life-style have all had a major influence on the identity of the Iraqi cities' built environment. One of the major changes In Iraq, to the extent of being a turning point, was the discovery of oil in 1927, which resulted in an economic, political, social and architectural transformation. The prosperity derived from the oil revenues along with the effects of modernity resulted in the creation of a new architectural identity that was foreign to the Iraqi traditional and cultural heritage (shirzad, 1987).

Factors such as colonialism and the discovery of oil allowed the intrusion of foreign traditions without any filtration. Modernisation in Iraq, as in many Middle Eastern countries, has been a very important issue for urban development. In the second half of the 20th century, the contrast between modernity and cultural values came to be a very important aspect in the social life of the modern Middle Eastern cities. The contradiction between the traditional and

the modern ways of life had the most negative effect on historic parts of traditional cities, whose main characteristics came to be the loss of cultural identity and a spiritless modern development (Ferdowsian, 2002).

Wilson, the first British colonial architect named as the head of the Public Works Department in Iraq, showed the extent of what was expected, both ideologically and programmatically, from architectural works. He spoke of "the tremendous influence that architecture can have on public life generally but especially on education. Iraq has been the home of a certain style of architecture which has influenced the rest of the civilised world. But present circumstances need a new style of building which, it is hoped, will integrate the best of the traditional decorative features. It is also intended to use natural building materials available in the country, so that what is built may truly become an Arab Renaissance" (Pieri,2008).

A significant problem was represented by the lack of public awareness toward the transformational tools that were unconsciously moving and changing the traditional habits and values of the local society. The transformational tools were at a certain time considered as a kind of liberation from the colonial period rather than an element of cultural crisis. The rush towards modernization without understanding its consequences came to be a major problem. To achieve architecture with identity, the old idea of modernity should be forsaken. The Modern Movement believed that the past and anything that was associated with history and traditions should have been dismissed (Manzoor, 1989). He add After half a century, though, from 1970 onwards, a current of thought emerged, as most architects around the world began to deem the fundamental idea on which the Modern Movement had relied as an enormous mistake and hence they began to remedy it by taking inverse steps, reconnecting their work to history and tradition.

1.3 Research Justification

Iraqi cities, in general, and the city of Basra, in particular, have not received enough attention in the studies that discuss identity and architecture. However, Basra and many Iraqi cities have undergone a significant social, economic, political and cultural change, which caused a dramatic urban transformation within the local urban built environment (Ali, 1988). The modernisation the affected the city has not taken into account the local conditions such as traditions, habits, the climate and the characteristics of the place: the history of the city has been ignored. Furthermore, the wars that took place in Iraq in 1980 - 1988, 1991 and 2003,

can be seen as the definitive historical moments that changed the city of Basra from a cultural, social and also architectural point of view. All the aforementioned factors have led to the loss of the identity of the city.

The attempts of the architects did not lead to a positive result due to the lack of reliable studies aimed at the analysis of Basra's architectural identity (Bazi, 1989). The majority of the studies of the sort written previously, can be defined as historical or descriptive, in other words, as documentary investigations or non-specialised studies. Hence, they were not analytical studies aimed at identifying the characteristics of the city's identity that could be used in future projects. It is, therefore, essential that any future development be informed by an understanding of these problems and shortcomings.

The motivation and objective of conducting studies on the traditional architectural identity aimed at the assessment of its characteristics is to find the way to transfer or recreate its useful logical principles. This is not achieved by means of the blind imitation or the copy of its appearance, but rather through the conscious and deep understanding of the esoteric principles of architecture (Seamon, 2011). As Al- Sultany (1982) wrote, regarding the years between the two World Wars: "There is hardly anything that has been written or documented about this period of architecture." Indeed, if it is true that, in the western world, the historical studies on Iraq are well documented in the fields of archaeology, Islamic studies (both Islamic schools of thought or Islamic arts), contemporary history, anthropology and political science, this is not the case for the architecture of the 20th century (Pieri,2008).

1.4 Problem Statement

Basra is a city distinguished from the other Iraqi cities due to its architectural identity, which has formed through many ages (Bazi, 1989). Nevertheless, today this identity is prone to deterioration and its unique style heading for disappearance. This is due to the lack of the studies concerning the architectural identity of the city aimed at identifying the main features of this identity so that they can be useful for maintaining it in the future.

Basra's identity was formed by history, tradition, habits, topography and the climate of the city. In addition to the features of the Arab Islamic cities, the cross-pollination with other civilizations due to trade or colonialism has given to the city a particular character that has distinguished it from other cities (Ali, 1988). Many external and internal factors have

threatened the identity of Basra on many occasions during the 20th century, transforming, distorting or obliterating it. The external factors are those pertaining the Ottoman occupation and the ensuing British colonisation, the modernity movement and finally the globalisation. The internal factors are mainly the policies of the previous governments and the three great wars of the last decades which affected negatively the society of the city and its demography. Most of the architectural landmarks of the city have disappeared as a result of the destructions occurred during the wars or due to the neglect and lack of maintenance that the city suffered during the time of the UN sanctions against Iraq, from 1990 to 2003.

Basra was under the attack of the bombs and the grenades for much of the 1980-1988 war and then again in 1991 and in 2003. Its unique architecture has disappeared slowly since, as the old buildings have deteriorated due to the lack of the necessary maintenance, as in Figure 1-1. The absence of awareness from the local population has contributed to a transformation of the local identity, which took place unconsciously within the society and resulted in an extensive modification of the local built environment of the city of Basra.

Figure 1-1: The Clear Dereliction on Architectural Identity of Basra City

The worst happened after 2003, with the arrival to Basra of foreign investment companies that implemented several kinds of projects in several fields. As to architecture, the designs of the project of these companies were foreign and alien, because they were carried out according to their cultural background. They thus ignored the history and the identity of the city, nor did they take into account the culture, traditions and values of Basra's society. They were far from

the city spirit, and represent a significant risk which could threaten both the architectural and, more in general, the cultural identity of the city.

As modernity and globalisation are unavoidable in present times, and as the city of Basra has a significant need of projects of rebuilding and urban regeneration, especially after the destruction wreaked during the war periods. Thus, there is a great need for specialised studies that can clarify and identify the significant characteristics and the main features of Basra's traditional architectural identity, in order to invest them in the future designs and development.

Figure 1-2: Dereliction and Destruction of The Iraqi Architectural Heritage

During the rebuilding of a city after a major conflict, it is often convenient, if not necessary to focus on new development. However, in the case of Basra, there is an opportunity to preserve or maintain the traditional architectural identity that is part of the rich cultural heritage of the city. Although newer, modern forms of development can and must be encouraged, they must not not occur at the expense of the city's identity.

According to all the information above, the research problem can be identified as "how it is possible to maintain a city's identity while enabling the city modernisation via urban developments".

This will be clarified through the following questions:

- How to preserve local identity? How to protect it? And then how to globalise it?
- How does the city become modern and join the global world while staying rooted in tradition and returning to the sources?

1.5 Research Aim and Objectives

This study examines the transformation that occurred in the Iraqi-built environment and that resulted in the loss of the local architectural identity for most of the Iraqi cities, and for Basra in particular. The aim of the research is to develop guidelines to guide professionals in producing urban design solutions aimed at maintaining the local identity while enabling modernisation.

The objectives of the study are as followes;

- To find out the factors that played a significant role in the formation process of the traditional architectural identity of the city of Basra.
- To identify the physical architectural elements that shaped the traditional architectural identity of the city of Basra.
- To explore how significant the role of cultural identity is in the formation of the architectural identity of the Iraqi cities, as well in the resistance against the influence of modernisation.
- To examine the degree of satisfaction of people for both traditional and contemporary architecture in terms of socio-cultural and environmental aspects, and to compare traditional and global architecture in Iraq in relation to their relative suitability for the socio-cultural and environmental conditions.
- To develop a set of guidelines of urban design practice as a guide for professionals to produce design solutions favouring traditional architectural identity while enabling modernising the Iraqi cities.
- To evaluate and validate the guidelines so as to use as a guide for urban design practices in neighbourhoods where the considerations for local identity are of socio-cultural and environmental aspects.

The research objectives mentioned above use both qualitative and quantitative data. The study attempts to develop guidelines regarding the future of the architectural identity of the city of Basra.

1.6 The Research Methodology

The methodology of research will adopt quantitative and qualitative analysis for three neighbourhoods of the city of Basra by using a comparative analysis. The first neighbourhood is the traditional one, dating from to Ottoman period, the second is related to the British colonial period of the city, marked with the changes and developments that occurred during this period, and the third is a modern neighbourhood. Each of the three periods shows different qualities and identities of built environment. The case studies are analysed through descriptive, qualitative and architectural analysis.

Both the theoretical and the empirical investigations have been used for the research. The theoretical investigation of the secondary data includes content analysis of the documents relating to the subject of the research such as books, journal papers and archival documents, with the aim of examining the context of the research problem and building a theoretical framework for the concept of identity and the urban transformation in the local built environment.

The aim of the empirical analysis is to reveal the relationship between the social and the physical environment, through the evaluation of the built environment. This is achieved by a questionnaire survey with samples of local residents in each of the three neighbourhoods, which allowed them to participate and explain their opinions regarding the identity of built environment in their areas. In addition, semi-structured interviews were conducted with the experts who have an impact on the built environment of the city of Basra. This helps in evaluating the features and characteristics of identity of each of the three cases, particularly regarding to social and environmental aspects. Observation as a technique for data collection was widely used in this study. Data analysis and evaluation followed, which led to develop guidelines with a set of recommendations and conclusions.

1.7 Guide to Thesis

Stages of the research include: identification of the research problem, literature review, choice of appropriate research methodology, analysis, discussion, guideline and, finally, conclusion of the research. The thesis is divided in eight chapters, as follows:

- Chapter One: Background of study, research problem, research question, aim and objectives, introduction to research methodology and research structure.
- Chapter Two: Review of the literature in order to develop a theoretical perspective, including a theoretical focus on the concept of identity, definition of identity, identity and built environment and types of identity.
- Chapter Three: Critical review of the historical background of the identity of Iraqi cities, transformation in the identity of the Iraqi cities and Iraqi cultural identity. This provides a basic understanding to find out how the city's identity has evolved.
- Chapter Four: Review of the historical background of the city of Basra, its geographical context, the architectural identity of the city and its main architectural characteristics as well as the masterplans and expansion stages of the city.
- Chapter Five: Explanation of the research methodology employed in this research, detailed description of the research method and research techniques (data collection and sources) and data analysis.
- Chapter Six: Detailed qualitative and quantitative analysis of the interviews and questionnaire survey.
- Chapter Seven: Discussion and evaluation of the key research findings and the validation of the proposed guidelines as a potential guide for professionals to produce urban design solutions focusing on the socio-cultural and environmental aspects in order to consider the local architectural identity while modernising the city of Basra.
- Chapter Eight: Drawing out of the research conclusion and recommendations, and suggestions for the direction of further studies.

Chapter 2: THE CONCEPT OF IDENTITY

2.1 Introduction

As this research examines the issue of identity, there is, therefore, a necessity to build a theoretical understanding in regard to the concept of identity and its meaning, which can be achieved through a review of the literature related to the concept of identity in the built environment and by identifying the essential aspects connected with the notion of identity. However, due to the study limitation, it would impossible to conduct a comprehensive review regarding the concept of identity, which yet is widely discussed. Nevertheless, there is great need for a theoretical base: it will result from the review of literature and will be used to conduct the empirical study investigating the change of identity within Basra's local environment.

This chapter clarifies the importance of the relationship between people and the physical components within the built environment by discussing the concept of place and its role in creating a sense of place depending on the emotions regarding the place, the attachment to the place and the memory of the place.

The chapter also illustrates the need for identity and its importance in the built environment since it creates the relationship between the tangible and intangible elements that form the environment. Accordingly, it is explained how the local identity may be affected by any change occurring in these elements or in the relationship between them.

2.2 The Concept of Identity

2.2.1 Identity notion

Identity is an ambiguous and slippery term. It is used in different contexts and has been uses very much over the past recent years for several different purposes (Buckingham, 2008). Hague & Jenkins (2005) mentioned that there are some suppositions about what identity is, as the word identity is related to the Latin pronoun “idem”, which means “the same”.

The Oxford Dictionary refers to identity as “the fact of being who or what a person or thing is”. Thus, identity is what is essential, factual and typical to something or someone (Amundsen, 2001). According to the Oxford Dictionary definition, identity provides us with an idea of who we are and of how we connect to others and to the world wherein we live (Woodward, 1997). There is a tension, even a contradiction, in the notion of identity. Identity means a form of core thinking. In other words, identity is described as an immutable thing. As Relph (1976) expresses it, identity is a phenomenon that defies a simple definition, although some of its key features are apparent. He states that the identity of something refers to a continuous similarity and unity allowing that thing to be distinguished from the others (Relph, 1976).

According to Locke's general theory of identity, a person is the same person in the past and in the present if that person has a continued history that connects his/her past to his/her present. Identity has been defined as a complicated and slippery concept as it has been used to encapsulate both what is unique in a person and how that person is similar to the others within a social group (Anthias, 2008). Charles Correa (1983) defines identity as a process rather than a found object. He confirms that our search for identity could provide us with a larger sensitivity not only for our environment but also for ourselves and the society in which we live. As Passi (2002) sees, identity is the object of critical interdisciplinary studies summarised by Tomlinson (1999) as an explanation of cultural belonging, in addition to being a collective wealth for local societies.

The process of identity creation can never begin from scratch: it is constantly shaped by a pre-existing set of symbolic materials, which shapes the base of identity (Thompson, 1996). The renovated transformed urban fabric leads to the concepts of reproduction of place and the reconstitution of place identity. As Lefebvre (1991) claims, the place is reproduced in order to offer a new synergy for the public: to reform the cords between the individual and the city, and finally to reconstitute the collective memory. A place that is shaped by the pre-visions of the changes in time, and the expectations of society, becomes the determining factor in the reproduction of place identity (Adam, 2012).

The phenomenon of cultural hybridisation that is currently common in most societies has resulted in two attitudes regarding the issue of identity: utter rejection or complete support. The first refuses any legacy from history whilst the latter believes that the past is the only evidence that can form the present. Nevertheless, both the trends agree on the adoption of

current era technology as they see it as a necessity, affirming that the past is different from the present, therefore treating the present by using the tools of the past would be ineffectual.

The historical trend is based on the selection of elements from the traditional urban environment in order to use them in the modern city. In general, it has two different approaches: the first is oriented towards history and tradition, whereas the second tends to abstraction, using technology to modify images (elements) retrieved from the heritage so as to obtain new forms that still retain a cultural depth. Whether this second approach is successful or failing, it reflects the desire to create an architectural identity rooted in the past.

Thus, identity can be seen in its dynamic form as a set of collective decisions, which are adopted by a certain society at a specific time to express its substantial social, aesthetic, economic and technical values, all of which form the whole picture reflecting the culture of that society, so that any threat to any of these values may be opposed by a spontaneous defence that acts as a guardian of these values against deterioration and collapse, by adapting the elements under threat to the nucleus of culture able to ensure the preservation of the essence, thus forming the desired identity (Al Naim, 2004).

According to Graham (2009) there are three principles of identity:

- Distinctiveness: the way people use a place to distinguish themselves from others.
- Continuity: the concept of self-preservation over time, as places allow a sense of continuity throughout the course of life.
- Self-esteem: using a place to create a positive evaluation of oneself.

For Breakwell (1993) there are four principles that play a key role in the creation of identity, which are:

- Sense of personal worth or social value, which is called self-esteem: it represents a core motivation and regards the penchant for a positive self-assessment or for a group to which the person belongs (Breakwell, 1993; Speller, 2000). As Vignoles et al (2006) refer, it can be achieved by means of cultural specificity.
- Sense of control, which is called self-efficacy: it is linked to the feeling of competence and sense of control over their own life that individuals have (Breakwell,1988).

- Uniqueness or distinctiveness: it is related to the feeling of being different from others, which is a basic need for humans in order to build the meaning of identity (Vignoles et al, 2000)
- Continuity regarding time and situations: it is a desire to maintain a stability for the self-conceptions with connection feelings across time and situations inside identity, in spite of the changes that happen in the social environment.

Charles Correa has suggested three principles to understand identity: firstly, identity as a series of continuous processes, rather than a static object: it transforms continuously over time; hence it is dynamic, rather than a tangible object, and related to the impact of civilisation throughout history. Secondly, since identity consists of a series of processes that cannot be fabricated, people develop an identity according to their dealings with what they realise from around them. Finally, he adds that identity is not related to self-awareness (Correa,1983).

Based on the above, for this research, the identity is defined as a set of tangible and intangible features distinguishing from the others in order to achieve uniqueness according to the similarity and differences than them.

2.2.2 The Necessity for identity

Identity represents an important requirement and an essential aspect of the life of a community, therefore it has acquired a high rank on the demand list for both individuals and groups in contemporary society. It is not related to any individual concern, but rather to collective and large-scale concerns. It is also not pertaining solely to present time or architecture, but it is rather a conceptual and historical subject. When humans realise the meaning of the sense of belonging and become aware of its essential significance, then they can understand “what they are” and “why they are here”. The necessity of belonging generates the concept of identity, which can be formed from a variety of different forms and often continuously. Identity is not a supplementary human element, enjoyable only when and if available: it is a main aim, as it justifies collective existence. Architecture as a form of civilisation plays a particulary important role in the formation of cultural, social and personal identities. (Abel,1997).

There are many issues that may increase the need for identity:

- The necessity of identity to become clear in case of an increasing interaction of friction with foreign elements, whether in the planning aspect or in other fields of knowledge.
- The aforementioned necessity of identity emerges as a reaction in the societies that have achieved independence after the colonial occupation, and, according to it, the physical environment, which is reflective and expresses the will of communities, becomes an arena for its expression.
- The necessity of identity becomes more required in those societies that have historical depth, as they possess historical and cultural inveterate stock
- The need for urban identity manifests itself in the case of destruction of a part of the heritage or the urban fabric of a certain place, which may occur for various reasons, such as a certain event or non-scientific maintenance approach, leading a place to lose its spiritualcharacter.

Maslow noted that identity is a need through which humans know who they are and what rules they perform in society (Lang, 1987). He suggests the existence of a hierarchical series of needs proceeding gradually from the strongest to the weakest, Figure (2-1), the strongest needs take priority over those that follow (Anderw, 2008).

- Physiological needs: needs associated with the principle of self-stability (internal) in humans (Homeostasis) as self- efforts made by the body to maintain its natural state.

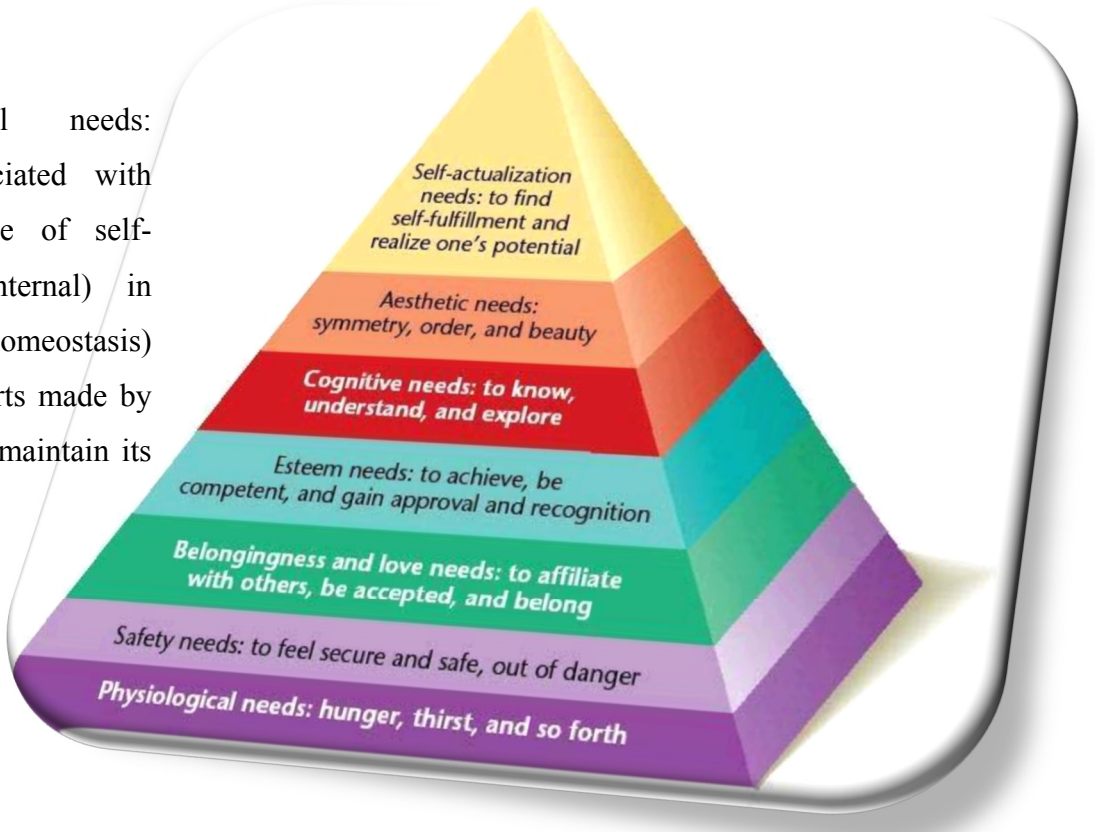


Figure 2-1: Maslow's Hierarchy of human Needs

- Security needs: a need to achieve security, stability, and protection from physical and moral dangers and freedom from fear, concern and confusion, in addition to a need for law, system and clear boundaries.
- Belongness and love Needs: an individual is in need for an interaction with his family, group and environment. He is also in need to have a close emotional relationship with other members.
- Esteem needs: an individual's desire to get a high stability value reflected in the need for confidence and for achieving and proving merit and efficiency and, on one hand, and the need to gain wealth, fame, domination and respect from others, on the other hand.
- Cognitive and Aesthetic Needs.
- Self-Actualization Needs: the human desire to satisfy hidden capabilities and self-build, represented by the desire for knowledge and learning as well as by the desire for a sense of beauty.

This classification provides a clear framework to understand the concerns of environmental design: the built environment provides considerations related to physiological needs and security through the provision of appropriate shelter and protection from physical and psychological harm.

Urban form plays a key role in achieving aesthetic and perceptual needs: on one hand, through components of aesthetic and symbolic form, on the other han, providing a spatially organised structure and identity (Lang, Jon, 1987). The degree and the way of satisfying all of these needs varies from one case to another depending on the perspective on life of an individual, his personality, his cultural and social belonging, and his life style. The collective attitude of the community determines the effects on the urban formation. Although the main motivations for this formation (such as imagination, creativity and logic design) are commonly available to individuals, they cannot affect the urban form design if not for the homogeneous individual attitudes.

2.3 Cultural identity

Culture has been defined as follows: "Culture comprises the whole complex of distinctive spiritual, material, intellectual and emotional features that characterise a society or social group. It includes not only the arts and letters but also modes of life, the fundamental rights

of the human being, value systems, traditions and beliefs" UNESCO (2002). For Stichweh (2008), culture is an expression of many aspects of society: lifestyles, norms and values, language, traditions, social interaction, the arts and aesthetics, beliefs, human rights, education, governance, cuisine, economy and migration, knowledge, fashion, etc., in short, all the intellectual, spiritual, emotional and material aspects of life. Culture does not mean a substantial and durable context of specific meanings like norms, values, styles, beliefs, symbols and so forth but rather a contingent horizon of time bound meanings. Consequently, culture can be understood as a kind of second-order observation and a form of discriminating practice regarding the broader social context of time-bounded cultural distinctions (Pott, 2005). As well as, Culture understood to be a system of social codes that permit information to enter the public domain by means of appropriate signs. Culture can be seen as a hierarchy of these codes, manifested through various texts (Jencks, 1998). Culture is not constituted by a system of objects alone (stand-alone objects?), but rather by a discourse that imbues these objects with meaning.

There are three main flows of cultural approach reflected on the built environment: popular culture, academic culture, and professional culture (Güzer, 2012). Popular culture is the one which is generally popularised by media and preferred by ordinary citizens. Academic culture may be defined as the intellectual-based culture which is in the search of rational justifications of given decisions, whereas professional culture is feed by both of culture and academic culture.

Undoubtedly, Culture should be considered as the most important and richest source of identity, in which individuals and groups find an identity by appealing to the diverse cultural elements, since these components, as a remarkable ability to differentiate and integrate human needs, have to be collected. According to Douglas (1997), Identity provides the foundation for option making, supports a social interaction, coherence and agreement, while simplifying relationships with the other in addition to highlighting sameness. Cultural identity is a matter of becoming as well as of being: it belongs to the future as much as to the past (Hall, 1993). It is a meaning making process that consolidates past traditions with contemporary conditions and desires.

According to Hall, there are two major ways of thinking about cultural identity:

- The first position defines cultural identity in terms of one shared culture reflecting cultural heritage and cultural codes shared in common. Cultural identity viewed as stable

over time since, as an inheritance, it has been selected and reinforced by many generations.

- The second position thinks of cultural identity as framed by two axes or vectors, simultaneously operative: the vector of similarity and continuity, and the vector of difference and rupture (Hall, 1996).

The natural heritage is valued as much as the cultural heritage as inseparable from it. Spending quality time in nature has become an essential part of socio-cultural practice; natural images have become cultural icons**.**

2.3.1 Cultural Resistance

The cultural resistance means the reaction of peoples that the do to facing the changes that happen on the built environment, when individuals and communities try to deal with the new and filter it to be closer to what they have already to ensure the continuity of identity. As Rapoport (1995) has mentioned, following the developments on connection ways, it's not possible to expect a full revival of traditional ways or a complete replacement of contemporary types, because in the first case the results will be a loss of originality, while in the second case will result in a total missing of communities. This leads the communities to be in a hybrid situation between traditional inherited and contemporary in varying levels approaching the traditional in some aspects and to the contemporary type in others.

This phenomenon related to the so-called "cultural resistance" which practice by societies during the time of urban changes. It is a similar to what called by Kenneth Frampton as "Critical Self –Consciousness" which is a process of disintegration, understanding, or adaptation of the new which borrow from other cultures. This should be done by both individuals and groups according to their own perception and to values system that gathered them (Frampton, 1983). It is a normal for communities to seek to preserve their identity by reproducing the images stored in their minds, which reflect their previous experience that has made according to the tradition.

These attempts encounter some obstacles due to social, political and economic circumstances. Therefore, a physical change issue in the urban environment seems a usual and continuous matter, since identity is achieved through a deep interaction between the individuals and groups, on one hand, and the elements of the urban environment, on the other hand. Thus,

identity is in a state of continuous formation that confirms that this urban identity is a part of the cultural identity of society, and its formation process can only occur through a collective historical agreement in which several factors overlap. For this reason, identity will be a result of this interaction and not directed it. The issue of the formation of identity is a temporarily matter, since identity is a phenomenon that is constantly formed, and at any times there is a level of identity that differs from its previous and next.

When local culture borrows new ideas or forms to be used in the urban environment, many processes take place to resist the new. These processes are the so-called cultural resistance in the urban environment. It starts from the cultural filter as well as from the personal filter, and the process requires a certain time for selection and adaptation, in addition to approach the new to what existed and imagined in the collective memory of the local people. In regard to the cultural filter, it is concerned with the values and collective memory, while the personal filter is related to the personal habits and aesthetic issues. The two filters work unconsciously as they form the perception and thoughts of the human being about himself and about all the surrounding environment.

These processes lead to motivate the humans to create a change within new physical environment, in order to make the physical environment in which they live in harmony with the cultural and personal filters, which does not mean that the urban environment will be in a chaos state in order to satisfy the work of the two filters. The dynamic filter is the personal one, which has a limited impact, particularly in the urban environment, while the cultural filter is more stable, so it is responsible for the desirable social model, which seeks to satisfy the essential values. In order to understand how response of shapes, which may enter to any physical environment for the interactions, they are subject to multiple adaptive factors depending on the circumstances. The socio-cultural aspects will be activating through the system of beliefs and the mechanism of abstraction which may daily, weekly, monthly and annual, seeks to develop a particular trend or vision of a certain group towards the new form (Mol, 1978). According to (Rapoport, 1977) the human has the ability to perceiving and knowing something through classification it and naming, then approach it to be closer to known forms and images, then evaluate and adapt it to be a part of the perceived environment.

2.4 Urban identity

2.4.1 Architecture

As, according to Le Corbusier (1960) “architecture is a thing of art, a phenomenon of the emotions, lying outside questions of construction and beyond them”, the purpose of construction is to make things hold together and the purpose of architecture is to move us (Padovan, 2002). Architectural feeling happens when the work rings inside us in harmony with the world whose laws we follow, know and respect. When certain harmonies have been achieved, the work captures us. Architecture is an issue of “harmonies”, it is a “pure creation of the spirit.” (Vogler, 2006). Architecture is currently in its direction towards the abandonment of comprehensive vocabularies requesting to be effective everywhere. Architecture is part of a building process following what is on the schedule and depending on the community and public requests (Durmus, 2012). The problem of architecture and buildings is that they are more tangible, static and permanent than other products of culture. While cultures change quickly, their architectural products remain unchanged, conveying moments of cultural change and development. Architecture is in fact within the dimensions of time and space and the influence of a humanitarian axis (community / civilisation), and is clarified as a reflection of the society life as it developed and reached a positive stage (Al Ani, 2013). Architecture is the pattern of human life: hence, it is a tool to be our identities and our differences, and bordering our knowledge of the world. Architecture mostly represents a symbolic production of the urban environment (e.g. with monuments) evolving a ‘collective’ mental image, which functions as a social attachment and ‘collective reflect’ (Lefebvre, 1991). This excellence of architecture, also identified as the ‘recognition effect’, symbolises a harmonious sense of belonging that is critical for building identities, by the operation of collective images and memory (Therborn, 2002).

2.4.1.1 Architectural identity

The notion of identity has always been connected with the history of architecture and could be manifested as the product of experience of conformity within the present and history of architecture. This leads to essential bonds with the memory or identity of every nation (Rapaport, 1969). The identity question related to architecture understood in its overall sense

cannot be simply measured or counted, due to its deep interconnection with the cultural meaning of places.

The constant and change is one of the features of identity. According to Gottlob Frege, identity is linked to meaning: for him, identity should be interpreted as an association between objects and their names,-names that refer to specific objects; thus, identity becomes a relationship between the object and its attributes (Edward, 1967). A solution to the problem of constancy and change has been developed. If change is an attribute of the object, the object will be having one identity which can express it by multiple cases, while if stability is the feature of the object, its identity is an expression of his unchanging case which is representative of his attributes. As a result of Frege's definition, identity is the fixed feature within the object despite its transformations, Figure (2-2).

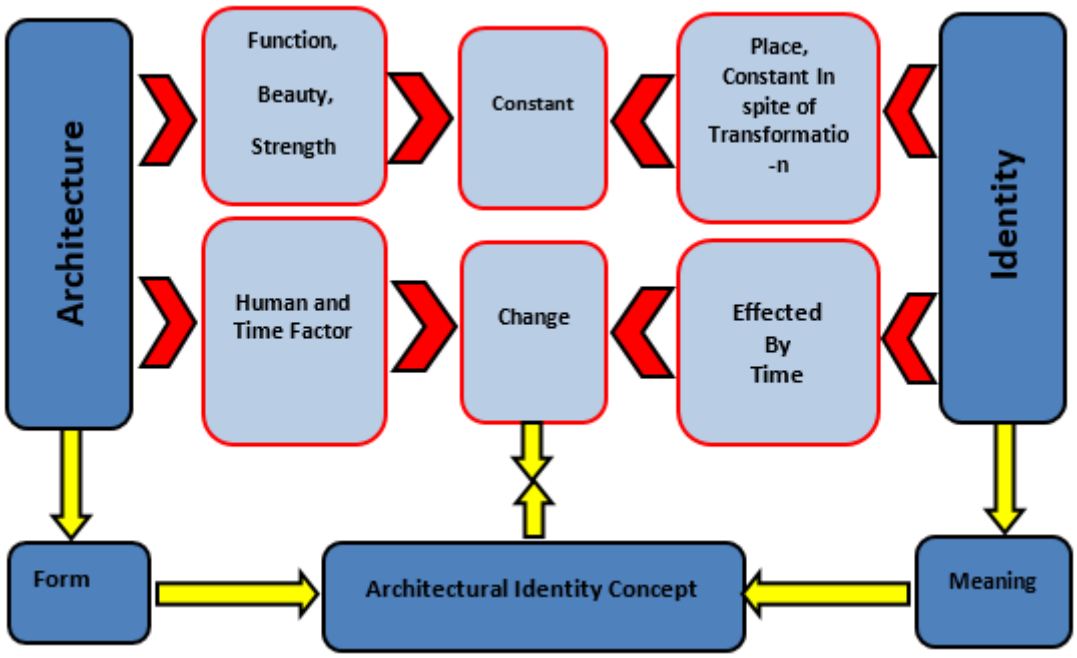


Figure 2-2: The Relation between Identity and Architecture

Any identity should have three dimensions: time, place and culture; the fourth dimension would change. Time and space are the main referents used to generate identity images in architecture, Figure (2-2). Time is associated with history and consequently gives legitimacy to the identity construction, which seems "rooted" in the past or "nourished" by it. Time presents a perspectival vision in the understanding of the concept of tradition and time is always variable. Space is related to geography, which provides the identity construction with a logical spirit and appropriateness. Geography characterises the contextual approach, and the

process of identification is resolved by a spatial matrix, moreover, it is usually constant. (Popescu, 2006).

Architectural identity is one of the phenomena of the general identity of societies. The definition of privacy in architecture is a reality covering essential qualities. Architects and urban designers have a single responsibility in their ability to transform and generate the built symbols that contribute to the complicated series of phenomena that form the identity of people and communities (Adam, 2012). Urban identity becomes significant just when people have the feeling of confidence, security and belonging to the city. Architecture and identity, individual and collective, seem to be essentially associated. This is right particularly for collective identities, since groups identify themselves with the place in which they develop, live, work, etc. Architecture represents a narrative which not only tells a story but is also able to symbolise history. Architecture ties past and future ages together, and creates the identity, as it concentrates the sympathy of nations. Architectural identity is, finally, not determined by the architect, but, somewhat, shaped and influenced by people's socio-cultural understanding of the built form, and the dominant contextual status within which they observe the built environment. This suggests that further studies on the cultural, contextual and historically transformative phases of the architectural identity are necessary in order to acquire a more critical understanding of the built environment.

There seem to be two present techniques capable of giving to modernist architecture an identity that ties a building to its locality: the spirit of place or a site-specific design, and symbolic identity or the architect's personal discovery of local symbolism (Lehmann, 2008). The two techniques can be used independently or jointly, but the process behind each of them is distinct (Adam, 2012). Architectural identity is influenced by particular social, cultural and contextually informed ideas adapted by individuals and the particular way in which they meet the built environment (Tran, 2010).

The new architectural design may restate an existing identity, maybe linked to a material culture belonging to the recent past. In this case, architecture may be important for the development of new cultural opportunities for the sites and the buildings of the production, such as new settlements or accommodation facilities (Bruzzone & Borghi, 2013). Sometimes, the new architectural design process may have the special skills to introduce a new identity through a feature designed for the territory, sometimes the design process may help to retrieve an ancient lost identity still strong in the place memory and the new architecture may

use the memory as a starting point as well as an opportunity for the introduction of new collective functions, creating a new identity (Bruzzone, 2011).

2.4.1.2 Place and Identity

In place theory, definitions of identity usually stress the importance of the persistence and uniqueness of the certain locality. In order to describe the identity and essence of a place, Schultz adopts the concept of "genius", and develops it into the concept of "genius loci". Schulz (1980) pointed out: "'Thing' and 'character' are dimensions of the earth, whereas 'order' and 'light' are determined by the sky. Time, finally, is the dimension of constancy and change, and makes space and character parts of a living reality…" Therefore, place exists between earth and sky and living with time (Yiran, 2009). The place is more than a location. 'Place' can be understood as a structure for 'identity' in terms of its physicality (Stedman, 2003). For Agres (1991), what we call the place is the theoretical model that describes and explains certain aspects of the built environment in urban contexts within a given structure. Ralph (1992) sees that "place" meant 'those fragments of human environments where meanings, activities and a specific landscape are all implicated and enfolded by each other'. People see and value places differently, depending on factors such as their experience, culture, and class (Appleyard, 1976, 1979). Places are defined by tangible material realities that can be seen, touched, mapped, and located. If place-making is a way of constructing the past, a venerable means of doing human history, it is also a way of constructing social traditions and, in the process, personal and social identities. We are, in a sense, the place-worlds we imagine (Basso, 1996).

The identity of the place is one of the important vocabularies that link human and architecture with the built environment containing it (Al Ani, 2013). The concepts of 'place' and 'identity' are increasingly being used to understand the relations between people and physical environments (Wright & Clayton, 2010; Patterson & Williams, 2005). The concept of identity can also be connected with an 'object' such as a place or a building. This object has certain characteristics that determine its unique vitality. This vitality defines what an object is and also differentiates one object from another (Shawesh, 2000). In this point, Ralph (1986) sees how the identity of place comprises both tangible and intangible characteristics which distinguish both its authenticity and its relations to other places. The place can operate at a range of scales – from the local to the national and beyond. It is, therefore, important that researchers do not predetermine the scale in question but allow participants themselves to

define the place with which they identify (Proshansky et al¸1983). Place-identity is the understanding of who we are in a relationship with the places in which we live (Opotov& Clayton, 2003). Furthermore, the identity of the place gets defined by the constitutive elements of the locality.

What emerges as place-identity, as Muminović (2013) refers, is a complex cognitive structure which is characterised by a host of attitudes, values, thoughts, beliefs, meanings and belonging to particular places. Relph, thus, argues how "static physical setting, the activities and the meanings constitute three basic elements of the identity of places". However, there is no inherent identity to places: this is constructed by human behaviour in reaction to places. Monuments, streets, neighbourhoods, buildings, churches, and parks are all material things, but they also evoke specific kinds of meanings and serve as spatial coordinates of identity (Lynch, 1972). White (1992) sees identity to have a qualitative nature and describes it as fuel for the continuity of control over conflicts that take place in a built environment.

2.4.2 The City

2.4.2.1 Identity and City

The city is regarded as a place for different activities concerning culture and economy. The influence of the city on the lifestyle of the people who live in it is a clear. Through history, the city has always reflected its society, since its meaning has always been related to the social events and social interaction that happen in it. The continuity and development of the built environment depends on the interaction between people and the city in which they live.

Nonetheless, this development is not always positive, such as the development that is mentioned by Faust (1992), as it is related to the diversity in the city, since he considers it as not fair because it leads to domination.

There is a link between the meaning of the city and the neighbourhoods within it, and the people who live in it in terms of their memory, attachment and history. In this regard, Lalli (1992) refers that the urban identity can be used to create high level of interaction between people and their built environment. Since it creates a sense of stability and continuance in regard to the built environment via supporting the development of personal identity.

Tuan (1977), sees the city as a perfect place or centre of meaning, considered as a symbol, in addition to include many significant visible symbols. For Doxiadis (1968), perception is very important issue, considered as a bedrock to achieve high quality and better performance, in addition to its role in creating the beauty of any component. Therefore, the visual stimuli could provide information that supports the work to be in the right way. Rossi (1982) has regarded the physical structure and its quality as the source to the formation of value, unity, symbol, meaning and history of the city. However, regarding the modern cities, these elements have been demolished.

The rapid urbanisation caused a cultural shock on society and cities. This cultural instability was directly reflected on the architecture of the cities. As a consequence, the fulfilment of people's needs toward the city with place identity is a significant thinking of environmental characters. This concern has been taken into account for redevelopment and re-growth of a traditional city (Hauge, 2004).

Kestof (1988) has referred that the city is an urban environment; it is a system composed of several secondary systems linked to each other via relations which result in the final form of the city, including:

- physical system: It includes the relationship of the buildings with the space that surrounds them within the city, in addition to the communication and transport systems that include the whole of transport, communication and information systems, which contribute to reducing time and distance, and which change the way of understanding and the perception of the urban environment.
- Cognitive values system: It includes the collective norms, traditions and the religious beliefs of each urban society within the cities. This system may be used to interpret individual human behaviour within the urban environment, especially in cities of a religious nature.
- Decision-making system: It is the administrative and legislative authority that makes various decisions related to planning and urban design of the cities by means of local planning laws. It plays an important role on the formation of the urban environment.

Kostof (1988) pointed out that there are some basic introductions to cities regardless of their forms and creation which are based on two basic definitions of the city dating back to 1938: the first, by L. Writhe, states that the city is a stable and relatively high density homogeneous

settlement of people, while the second, by Lewis Munford, states that the city is a point of maximum concentration for power and civilisation for a particular community.

2.4.3 Landscape

The role that the landscape plays in the enhancement of the city's identity is regarded as a key role. There is a strong relationship between the natural environment and the identity built environment: the definition of the identity of the built environment depends on the features of the natural environment. There are many natural environments within the world, thus, this directly affects the people who live in them, especially in regard to their sense of place (Lawrence, 1987). The features of the place should be taken into consideration by the architects and designers in their designs, as the character of the place is different according to its natural aspects. The harmony between human and the nature should be reflected via the city, the care and the interaction with nature seen as a manifestation of the city's identity in regard to the natural environment (Kutcher, 1973).

Place and its landscape become part of one's identity and one's memory. Its features are often used as mnemonic devices, the landscape is replete with markers of the past graves and cemeteries, monuments, archaeological sites, place names, religious and holy centres that help us remember and give meaning to our lives (Sack, 1997). Rossi considers the urban space as representing multiple and diverse patterns that exist in the collective memory of the city's residents via the former and the new meaning during time change and pattern stability.

Identity based not only on the physical and formal composition of space, but also on the concept of meaning. It is the product of the interaction of human values with spatial characteristics and the individual's sense of belonging. The nature of identity in the built environment can be determined through three basic factors:

- Location: the natural, geographic, characteristics of the spatial location and its relation to the natural environment.
- Spatial composition: the general composition of the urban environment and its main patterns.
- Articulation: the elements and features that are related to certain sensory and symbolic connections.

2.5 The Dimensions of Identity

2.5.1 Social and Identity

It is important for a society not to rely on its past without considering how to meet contemporary needs. In this respect, Kreidieh's suggests that holding on to an identity does not mean imitating our predecessors, since we are different today. However, in order to maintain a sense of continuity, new generations must understand the features of their identity and be involved in its continuing processes. If we do not engage in doing so, change undoubtedly will take place thanks to the great impact of globalisation (Kreidieh, 2008).

According to Breakwell (1993), social identities are a composition of sets of social tools, rules, ideas, memberships and relationships. According to that, it can be attached any individual or group following these to the social identity. Any social context has certain qualities, values, belief systems, or concepts, which represent its core, and connect with the features of social identity. However, a conflict may occur sometime between personal, group and social identities with different qualities, values and ideas. Diversity represents the main problem because the rules and regulations of the society seek to keep the unity, which could contrast with the various desires of people, whether individual or group.

Identity is an essential component in a society's structure in which one can feel a sense of belonging within one's society, as well as the ability to interact with others (Jenkins, 2008). Identity is always a matter of sameness and difference, any reduction in the difference between communities is bound to erode the distinctiveness of community's identity. According to Croucher, Identity is an idea that is qualified by positive features and clapped to the degree that it overlaps with such characteristics and generates a sense of belonging. It is always depending on an "Other" and, belonging to an "Us", demands the presence and acknowledgement of a "Them". Belonging, by itself, needs and involves boundaries (Croucher, 2004). If place-making is a way of constructing the past, a venerable means of doing human history, it is also a way of constructing social traditions and, in the process, personal and social identities. We are, in a sense, the place-worlds we imagine (Basso, 1996).

Rapoport (1981) has pointed out that there are two points that should be addressed to determine the identity in built environment, the first is related to the content while the second is related to the boundary. Regarding the content, the way to identify it could be achieved through re-classifying the unit that involve conflicting group to other units or other built

environments. In terms of boundary, in order to isolate the domains, kinds of boundary are required. These kinds of boundary maybe according to geography, religion, place, or ethnic, while language, fashion, behaviour or other norms could be used for the communication of the identity.

2.5.2 The Sense of Place

According to Graham (2009), Places – as genius loci – can be thought of as being made up of a range of factors which include the topographical, the cosmological, the built environment and people's emotional and psychological engagement with the place. Similarly, Rose (1995) observed that "places are infused with meaning and feeling". Although identity is commonly used in the field of psychology, place identity cannot be interpreted solely in terms of its psychological status because it is relational of nature. Place-identity, such as feelings of belonging or revulsion. Gillian Rose expresses the same point: "One way in which identity is connected to a particular place is by feeling that you belong to that place. It's a place in which you feel comfortable, or at home, because part of how you define yourself is symbolised by certain qualities of that place" (Rose, 1995**).**

Place identity has been understood as helpful when delineated by its relationship with concepts of place attachment and place dependency – although there is no consensus on the definitions of the three terms or on how they relate (Graham, 2009). "Place identity", "place attachment" and "place dependency" have been measured by several researchers working in social psychology. There are two widely recognised scales. The first comes from Shamai (1991) and has been adapted by Williams (2000) and in later work by Shamai and Ilatov (2005). Shamai and Ilatov argue for the importance of including what they call a 'bipolar' measure – leaving room for both positive and negative feelings about the place. Williams works with two scales: one geared at a place attachment measure specifically for tourism or recreation place (2000) and one at a broader 'sense of place measure' (2000). Both of these measures are widely quoted in the social and environmental psychology literature. Identity is a basic feature of our experience of places, which both influences and is influenced by those experiences (Relph, 1976).

For Angela Martin, Identity is formed and continually reinforced via individual practice within culturally defined spaces. The sense of place, as a component of identity and psychic interiority, is a lived embodied felt quality of place that informs practice and is productive of particular expressions of place (Martin, 1997). Generally, identity is the sense of belonging to

both spiritual and physical compound whose components have already shaped (Cornell & Hartmann, 1998).

2.5.2.1 The Emotion

The communities are often in need of stimuli that remind it of ancient symbols. Sentimental nostalgia is regarded as the most important stimulant. Nostalgia is a state of abnormal longing to the past or recover of an irreversible situation which is largely a result of inability of the self to adapt to developments or changes, especially if those were accelerated and have a great impact. Thus, it is a kind of quite self-alienation.

Nostalgia for the past is a kind of internal alienation and use of old images within contemporary urban environment. It is a kind of rejection for melting with other civilizations, which represents a real threat on local cultural. The emotion may lead the communities to metaphor the symbols from the past when the identity of a society is threatened according to rapidly changes. In the light of this, Dalley the British architect who worked as an urban planner in the Arab area for many years, has mentioned that the significant matter for Arabs is the influence of foreigners on the social values and customs of local people. So, they may be right not like to be an influenced by our own way, however, it is hard to imagine how they can avoid this influence if they insisted on getting an advanced development in a short time (Dalley, 1995). One of the most important positives of nostalgia is the restoration of social and visual collective symbols, that are deeply rooted in which creates a connected society and established the language that is understood by local people (Al-Naim, 2001).

For Burgess (1980), a valuable environment is the environment that includes the emotional bonds between human and space. While Gosling (1980) noted that the power of association is clearly appearing when a place is threatened by change, especially in urban development projects, since the residents feel a strong emotion towards their place of residence because of the association of this environment with their memories. Thus, the residents try to adapt to the new environment, in order to suit their concepts and activities, or they may reject the new environment (Becker, 1997), which has a negative impact on the behaviour within the space, such as orientation, communication and social interaction.

In this regard, Rapoport pointed out, that the changes in the shape of the cities can lead to significant changes in behaviour, either positively, such as enhancing psychological comfort that enhances interaction, or may be inhibiting for activities (Rapoport, 1977). It should be

noted that the nostalgia does not aim at restoring the past, but rather it aims to benefit from its contents as long as these contents are agreeing with the society's needs and requirements.

2.5.3 Environment and Behaviour

There is an ongoing reciprocal relationship between people and the places that they inhabit. People produce places, and yet they derive identities from them: "people are constituted through place" (McDowell, 1997). However, there can be both positive and negative effects from this interaction of place and experience. Humans create "place-images" that become central to daily life and social practice. The central thesis is that human attachment to particular places requires an understanding of peoples' traditional knowledge, cultural practice, forms of communication, and conventions for imagining the past.

The definition of affiliative behaviour as a positive way of social interaction reflects the physical and emotional interaction with others. It represents a belonging or associate's need in addition to the relationship with others who own the same social and cultural values (Al-Hokail, 1995). Satisfying of the human needs, which are, as psychologists mentioned, identity, self-actualisation, understanding, nurturance and security of the others, could play a key role on the creation of the concept of affiliative behaviour (Fadel, 1982). The enjoyment level of the residents for their surrounding built environment could affect on their social relationship positively or negatively.

According to Noble (1963), when architects create an environment, they should able to form the behaviour of people who use this environment. He argued as well that the rational accuracy of understanding and predicting of the human behaviour by architects affects the success or failure of any design. There are three factors that can affect the relation between the physical environment and the affiliative behaviour which are: the physical environment, the overt behaviour and the internal factors that motivates such behaviour (Fadel, 1982). The internal factors of the residents which will be translated into process of affiliative behaviour are: perception, cognition, motivation and emotion influenced by the physical features within the built environment.

2.6 Levels of Identity

According to (Al-Naim, 1998), identity moves in four levels: from the individual Perceptual Identity to the Collective Perceptual Identity, then the Individual Moral Identity, and finally the Collective Moral Identity. These four identity levels are linked to the Spatio-Temporal Path, in which objects and shapes are transferred from the individual sensory identity to the collective value identity through a complex and historical interaction between human and the surrounding objects.

The identity consists of different dimensions and forms that interact with each other continuously. According to this interaction, the physical identity is formed in the urban environment at a certain era. As Blee (1966) has argued, identity can be achieved at different levels from physical to spiritual and within different formats from individual to collective.

In order to understand the interaction and the shapes that resulted, Bourassa (1991), assumes an existence of the four levels of identity that are associated with the Spatio-Temporal Path, in which the forms from the individual perceptual identity are transferred to the collective moral identity via a complex and historical interaction between man and the things surrounding him.

The term “perceptual identity” refers to the dynamic of identity, which is associated with the sense that is constantly formed with the exposure to new forms, while the moral identity often develops after the perceptual identity. There is close interrelationship between the meaning and the physical form, which has been mentioned firstly by Ralph Linton. The extent of this interrelationship is such that the original function of the form may disappear completely but the meaning remains constant: this interdependence makes a connection between feeling and ideas or between the stimuli and response is inevitable.

The individual perceptual identity is adynamic, and could change rapidly because it is linked to personal vision and desires as well as it is related to functional forms. It expresses how a human perceives a form and how it perceives its sensory meaning. This identity expresses low-level meanings, however, when a human develops a deep relationship with forms and spaces surrounding, so it is a way of making its moral identity, since the individual moral identity takes longer to form, as it assumes that the human is intimately connected with the shapes and spaces surrounding him.

This individual moral identity expresses the individual's view of the world and the manner in which he is abstract of his meanings to reflect his own values. In general, the individual moral identity is subject to collective moral identity. While the collective perceptual identity is usually appearing through forms able to reverse collective meanings. These forms may be inherited from previous generations, e.g. ancient forms, however, there are new forms that may play the same role when they find collective acceptance by the people. This identity involves a connotative meaning and represents an important part of the urban identity.

Table 2-1: The Levels of Identity (Al-Naim, 2001, p. 109)

	Perceptual	**Moral**
Individual	Individual Perceptual Identity	Individual Moral Identity
Collective	Collective Perceptual Identity	Collective Moral Identity

Collective moral identity is less dynamic, because it expresses the cultural core, however, as it can be physically represented by the surrounding forms, it can continue despite the change of the shapes. In this light, there are many new forms that are imported from outside to the local environment and are transforming and adapting in order to express the collective moral identity.

According to White, identity appears in four layers: the first comes from expression and is a kind of social safety footing: the second layer is a more organised sense of identity. It is a "face" and usually belongs to group identity. A third level is produced by contradictions, errors, and self-interest across orders. The fourth and final layer is a coherent identity and this occurs when facts are presented in an order that creates rationalisation, including those about the failures of actions (White, 1992).

2.6.1 Stable and Dynamic

Identity is not a fixed place that can be defined once and for all, but it is rather a process which is not free of changes and transformations (Ollero, 2001). Applying Foucault's theories to the built environment concludes that architectural identity is unstable over time, as it is shaped according to historically specific discursive and contextual conditions.

It is important to note that “the notion of Identity is not as a static system or closed system, but as impregnated by the local culture, changing over time and allowing critically evaluated influences from outside” (Spencer and Seabra, 2012). “Identity is a dynamic phenomenon and when expressed in everyday life, as for instance through action premised upon a meaning given to home ownership, it should not be seen as a static property of individuals but as product of intentionality in a given and changing social context" (Agnew,1981, p.88). Hall (1990, p. 222) has a similar view: "Identity is a production which is never complete, always in process, and always constituted within, outside representation". From Hall’s viewpoint, we can read and understand our identity in a dynamic manner. Once we understand the dynamic value of identity, we will be able to look at traditions in creative ways. This will ultimately result in finding a smooth relationship between past and present within a contemporary context. Urban identity is a dynamic fact taking its shape from and changing under the effects of the natural and artificial physical elements of the city and the social factors canalising these elements (Czumalo, 2012).

According to Al-Naim (1999), there are two perceptions for the concept of the identity: the first is the metaphysical perception that believes that identity is an object, which is completed and achieved in the past during a certain period or a particular social model, thus the present is an attempt to realise this model and achieve it. The second is the historical and dynamic perception, which regards the identity as an object to acquire and update constantly, rather not always fixed. Therefore, the original identity is constantly changing: it acquires new features and renounces others.

The first attitude seeks to adopt a model of identity as a fixed entity, defined in form and substance, it perceives the identity of the present society through the transfer of ready forms from the past, regardless of the immediate circumstances of society. The second attitude, in contrast, seeks to strip identity from any previous frame or feature, gives identity the freedom to be formed within developments framework, without being bound by any reference or historical basis.

Cultural identity cannot be thought as a static matter, only turned to the past, supported by immobilised traditional values. On the contrary, it must consider as a dynamic issue necessary to evaluation and to internalised action, in order to avoid not only the former static understanding or approach but also the other approach where everything is copied in a frivolous manner. For Song (2005) cultural identity is “not a fixed and unchanged essence that transcends time and space, or a true and authentic origin, to which we can ultimately

return, cultural identity undergoes constant transformation". Thus, when searching for cultural identity, one should expect to find several overlapping identities.

The architectural identity is discontinuous across time as its formation is influenced by prevailing ideas, practices, or discursive conditions that are specific to a given historical period: this highlight architectural identity as an unstable, contextual construct that is culturally malleable and historically discontinuous across time (Tran, 2010). In the transforming and creative process, designers will make - and usually wish to make - buildings and places that are in some way distinctive: the impact of these buildings in urban scale takes a very important place in the modern city. Their architectural expression is not limited to their individual scale but rather it becomes an integrated part of the whole city, which is open to transform function, infrastructure, architectural meaning, image ability and other social problems (Adam, 2012).

2.6.2 Individual and Group

Identity can be a statement that makes a distinction between individuals, groups and societies. In this regard, identities are categories that define people in relation to others (Shawesh, 2000). As Augie (1992) observes, groups need to think at the same time about their identity and their relationship of internal unity, and thus they need to represent the elements of their shared identity. Hence, capturing space serves to construct the collective identity.

Mol (1978), has divided identity into three types which are: personal identity, group identity and national identity. Then, Beals has added one more type of identity that is the cultural identity (Lewins, 1978). Rapoport (1981) has argued that there is a variance in terms of the social unit between the humanity as a whole and the individual, he adds that via the opposition between culture, which is human, and the nature, which is non-human, the personal identity is created.

Regarding the western culture, the availability of individual identity is widely common, whilst it is not the same within the traditional society, since the extended family is regarded as the main feature in it. Thus, the consideration for the group identity more is significant than for the personal identity (Al-Naim, 1998). The differences between individual identity and group identity create a struggle between them. Therefore, to overcome this, there is a necessity to move from one level of identity to another. In this regard, Mol (1978) has pointed out that there is a transformation for emphasis always happened from the social to group identity when any great change happens within the time. Beals has regarded that the

emergence of social identity will be a reflection for the commitments of both individual and group. The common identification, as it is defined by Bloom (1990), occurs when people share an aim with each other in order to preserve the shared identity.

Lewins (1978) regarded that the subjective or individual basis that support the emotion could be provided through the effective links, which are represented by the individual identity, while the group identity represents the quality of connection which links a group via set of interests. Accordingly, there are many various elements for the group which guide the identities and the images of their members, such as location, special cultural fashion, unique language and social and culture isolation, which results a feel they belonging to a distinct group (Shaffir, 1978). The historical bonds that members have made together through factors like class, religion, ethnicity, ritual and time spent together will indicate how members in that group will respond as a whole to maintain their collective identity (Bloom, 1990).

For Hall, identities are the names we grant to the diverse ways that we are located by and that locate ourselves within the narrative of the past (Hall, 1993). Hogg and Abrams also declare that identity is "people's concept" for self-acknowledgment in addition to an approach to express the connection to the others. Identity would involve the fact of the relationship between an individual and his society, determined by social classes that describe him in his environment (Jenkins, 1996).

Proshansky, Fabian, and Kaminoff evaluate place identity and its relation to self-identity. Their definition of the issue also shows that the evaluation of identity of place changes from person to person, since place identity is a sub-structure of the self-identity of a person consisting of broadly conceived cognitions about the physical world in which the individual lives (Proshansky, Fabian, Kaminoff, 1995). Place identity can be used to refer to the way in which place is a subset of every individual's self-identity. It formed through milieus of feelings, meanings, experiences, memories and actions that, while ultimately personal, substantially filtered through social structures and fostered through socialisation (Noormohammadi, 2012).

2.7 Modernity

2.7.1 Concept of Modernity

Modernity is what gives the present the specific quality that makes it different from the past and points the way toward the future (Berman, 1994). It is described as a break with tradition and as typifying everything that rejects the inheritance of the past. For Simon (2005) Modernity is the period of the new. It expresses historical transformation across the range of disciplines, periods and locations by connecting the events, people and ideas of the past to construct an account of the meaning of the present.

In Habermas's view, modernity is a civilised phenomenon with various forms and intellectual contexts with multiple meanings. It looks forward to new discoveries of new worlds (Afaya, 1998). It may also mean the process of selecting elements belonging to other and different civilisations or cultures. Berman (1994) explains modernity as a non-continuation or modification of the past: a new form of human self-consciousness as a mode of power. Modernisation theory according to Habermas is an analysis and evaluation of modern forms of social life. Habermas explains that modernity is more than a period. It indicates the social, political, cultural and psychological conditions that arise from certain historical procedures (Finlayson, 2005).

Modernism in architecture is a term that describes a "new" work which distorts all the relations and formal rules of traditional knowledge (Stern, 2009). Ibelings (1998) elucidates that new Modernity (Supermodernism) aims at using separate programs for the buildings, regardless of time and place, through the use of technology and accepting globalisation in order to change, mix and create a comfortable environment refusing the cultural background.

Table 2-2: Concept of Modernity in Architecture (Baper, 2010)

Modernity	Description	
Aims	To rebuilt the existing body of knowledge	
	To change elements of a system	
	To change relations of a system	
	To change orders of a system	
Concepts	Present as opposite of past	
	New as contrast with old	
	Transient as opposite of perpetuity	
Motivations	Great discoveries in the physical sciences.	
	The industrialization of production, which transforms scientific knowledge into technology.	
	Huge demographic upheavals and rapid urban growth.	
	Systems of mass communication.	
	Powerful national states.	
	Mass social movements of people.	
	Variable capitalist world.	
Features	**Architectural point of view**	Capitalist approach
		Form phenomenon
		Process of newness
		Anti-Traditions
		Establishing new Rules
	Philosophical point of view Modernization theory	Uncompleted project
		Civilized Phenomenon
		Multiple faces Event
		Communicative Discourse
Achievement mechanisms	**Transformations**	Reshaping an object
		Changing inner pattern
		Visual Shifts
		Adaptation of cultural
	Change	Variation
		Cultural borrowing
		Invention
		Temptation

2.7.2 Traditional and Modernity

Tradition is an output model that resulted from the cooperation between many, created over many generations (Rapoport, 1969). He adds that tradition owns a power earned from the collective agreement of the people within society, which is equal to the power of law. According to that, the collective control is a result of the respect of people within a society for tradition, which is considered a discipline for this society. However, tradition is not only related to the issue of the set of beliefs which may be handed down simply or accepted easily

Wilson (1988) has mentioned that a society cannot be modern and traditional at the same time (Fu, 1990). However, within the modern societies, there is an opportunity to find parts of tradition, despite the disappearance of their original society, even if these parts are not enough to reflect the tradition as a whole. In this regard, Shils has mentioned that the development and survival of new concepts depends on ambiguity and flexibility of the traditions, in the light of this, he states:

"Traditionality offers a by no means insuperable obstacle to the development of a modern polity. Traditions often possess sufficient ambiguity and hence flexibility to allow innovations to enter without severely disruptive consequences. Then, too, patterns of traditional beliefs (and their accompanying practices) do not form such a rigorously unitary whole; some parts are more affirmative towards modernity, or at least less resistant towards innovation. Many traditional beliefs are not so much objects of zealous devotion to symbols of the past as they are the resultants of a situation without alternatives. Once alter natives become visible and available, what appeared to be an immobile tradition might well yield to a new practice" (Shils, 1960, P282).

As it is known, the full rejection of traditions and traditional values creates a modern society. However, it is important, for modern societies, to retain a continuity with tradition. Modernity is described as a process of new search for contemporary forms, which is constantly in conflict with tradition. According to Giddens (2002), the term "modernity" involves the progression occurring in societies leading them to be classified as advanced rather than as primitive. For Long and Arce (1999), modern is a term that refers to belonging to the present. In addition, it establishes an awareness regarding the past in terms of people linked with it.

Taylor (1995) has mentioned that any culture can pass through modernity, as modernity is a set of transformation processes. Therefore, sometimes, a culture can be forced to adopt modernity. Al-Naim (1998) regards the social resistance created by the local people in order to achieve a balance between the foreign values, earned from outside, and the local values, still deeply rooted in the local environment, as a result of the continuity of the traditions in the modern societies. The process of transformation from a traditional to a modern society requires a long time and does not happen smoothly. In addition, there is not a certain way or specific linear move to achieve this aim, as both societies can be traditional and modern at the same time (Chabal & Daloz, 1999).

In the past century, the impact of modernisation processes on the traditional societies can be seen very clearly. Modernisation is a process which may take place for every society and at any time, it is related to a process of westernisation, which started during the colonialisation period forcing the occupied societies to follow the western criteria in terms of lifestyle. Modernisation process is focused on the imitation of the West; thus, it is not a process of creation or innovation (Al-Sheliby, 2015). In this regard, Rapoport (1969) has pointed out that:

"There is a danger in applying western concepts which represent only one choice among the many possible, to the problems of other areas, instead of looking at them in terms of local way of life, specific needs, and ways of doing things."

2.8 Transformation

The word "change" as a noun is defined as "*the whole of the changes that take place within a time period*". In English, the word "change" is defined by the Oxford Dictionary (Oxford Dictionary, 2010a) as "*an act or process through which something becomes different*". The word "transformation", which is conceptually related to change, means "*coming into a form different from its own, occupying another position, changing form*" (BTS, 2010). Transition is a change of state: a change from one thing to another, "a passing or passage from one condition, action, or rarely place, to another"; change, "the passage from an earlier to a later stage of development or formation; a style of intermediate or mixed character" (Haslett, 2003). Thus, transformation is a change of state, a whole and more complete change than transition. The action of changing in form, shape, or appearance, metamorphosis "a complete change in character, condition, etc". In physics "*Change of form of a substance from solid to liquid, from liquid or solid to gaseous, or the reverse"* (Repenning,2003). The most significant factor affecting the transformation process is change (Durmus, 2012). It can be pointed out that both interdisciplinary interaction and change within the discipline itself establish how and in what direction transformation will occur. Essentially, change is a state originating from the nature of existence and thus defines transformation (Durmus, 2012).

Even though change and transformation depending on change are criticised in certain ways as the local identity is being lost, they are anticipating an alternative way to build the future (Aydınlı, 2005). Douglas (1997) claims that "*the social and political change, particularly if it has cumulated over protracted periods of time, will lead to identity change*". New social structures that are caused by change provide new ways of expressing identity.

In his book, Architecture & Identity (1997), Chris Abel asserts that transformations are a form of change that ensures the continuity of the new output with the original model. He also explains the importance of the successive transformations of the original models as a formula changing them. However, he mentioned that it does not include changes within its intrinsic characteristics that have been associated with its cultural continuity despite all the changes that have taken place. Architecture must anticipate transformations and focus on designing life and spaces of the future, it is now important to take the future of the branches of architecture and any kind of activity into consideration (Durmus, 2012). On the contrary, it is necessary to keep away from static thoughts. The meaning of things is not historically continuous since they specifically formed and are rationally understood according to particular discursive, contextual conditions at a given time.

Table 2-3: The Degrees of Change

Degrees of change	Description
No change	Copying the source without any modifications
Minor changes	Partial change of system elements
Adaptations	Mixing the source with new elements
Major changes	Changing the system relations
Total changes	Altering the system rules and regulation

The transformation of historic urban environments, as an attempt to reproduce space, has always been a paradoxical phenomenon. Transformation projects that aim at consolidating, reorganising and revitalising the historic fabric usually face problems concerning the weakening of collective memory and the annihilation of place identity (Akkurt, 2012). Bourdieu's notions of the formation of meaning reveals how people memory, past experiences or ideas, and their socio-cultural association with the built environment play a pivotal role in the construction and transformation of architectural identity (Tran, 2010). Within the transformation and/or reconstitution of place identity, the changes of place,

society and time are taken as key factors. While time (always) and society (usually) are subject to changes, the place also changes in relation to them.

The change in the urban environment is inevitable in order to achieve the interaction between human and the surrounding environment. This interaction cannot occur unless the human gives special meanings to the things surrounding him, which often coincides with the creation of change in the urban environment until some convergence occurs between substantial values and the physical environment. Change and adaptation processes are a fundamental mechanism that enable the human to maintain identity, since the psychological processes that make human life are dynamic, thus cannot reproduce individual and collective identities without the ability to adapt and change.

Figure 2-3: The Process of Transformation in Architecture (Baper, 2010)

The changes in urban identity represent a continuous cultural phenomenon. S. Giedion has shown a significant interest on the permanence of some of architectural elements over time, in spite of the changes in technology and ideas. He referred that the stability does not mean only the continuation, but it is the ability of the human mind to revive something after a long time (Benswessi, 1987).

The new forms are subject to continuous transformations in order to be close to the forms within the collective memory that express the essential meanings of society: whenever there is a shift in the common meanings, decreased the need to transform new forms. Gopalan states that the concept of identity is a sequential process supported in a coherent way by considering individual and collective aspects as dynamic situations (Gopalan, 1978).

Human values cannot be fully expressed physically, that is, there is a need for abstraction in order to understand the human values that are associated with the forms and the architectural spaces. In this light, the forms created in order to communicate act as a language reflecting the values and ideas. However, the forms often evolve according to a functional need, then have continuous abstraction until they become, over the course of days, forms owning implicit meanings, which are understood and decoded by the human group that have created them. In this regard, Punta emphasises that the meanings of things are not inherent in them. However, they become meaningful because of our knowledge of them, in other words, because of their social function (Benswessi, 1987). The human communities have the ability to make forms expressing the essential common meanings that reflect their cultural identity, in addition to giving to these forms a new sense to express the era.

Parsons has developed four mechanisms to understand the change and adaptation that occur in societies. The primary adaptation mechanism identifies change as an unfamiliar event, while the mechanism of relative deprivation supports the mental process positively through a sense related to the old traditions and a comparison between the old and the modern. The Mechanism of Internalisation will then incorporate the new into collective interest, and finally the Mechanism of Reinforcement will lead to the acceptance of the new as a new tradition coherent with the prevailing social structure (Parsons, 1964).

As the human visions are changing before they can develop forms that reflect these visions, hence there is a continuous need to develop symbolic forms, it is necessary to consider identity in the urban environment as a continuous dynamic mechanism that consists mainly of relationships and interactions between cultural and social values, on one side, and different physical forms, on another side. That does not mean that the urban identity will change from time to time, but rather means that identity, via the four levels, will move from one level to another, over time. It is natural that urban identity is at a strong level over a specific time in which the urban forms through an interaction with socio-cultural values achieved the level that can reverse the collective value identity and then weaken. Alternatively, it may be weak in another period then become strong through increasing people's conviction with new forms albeit giving it special meanings.

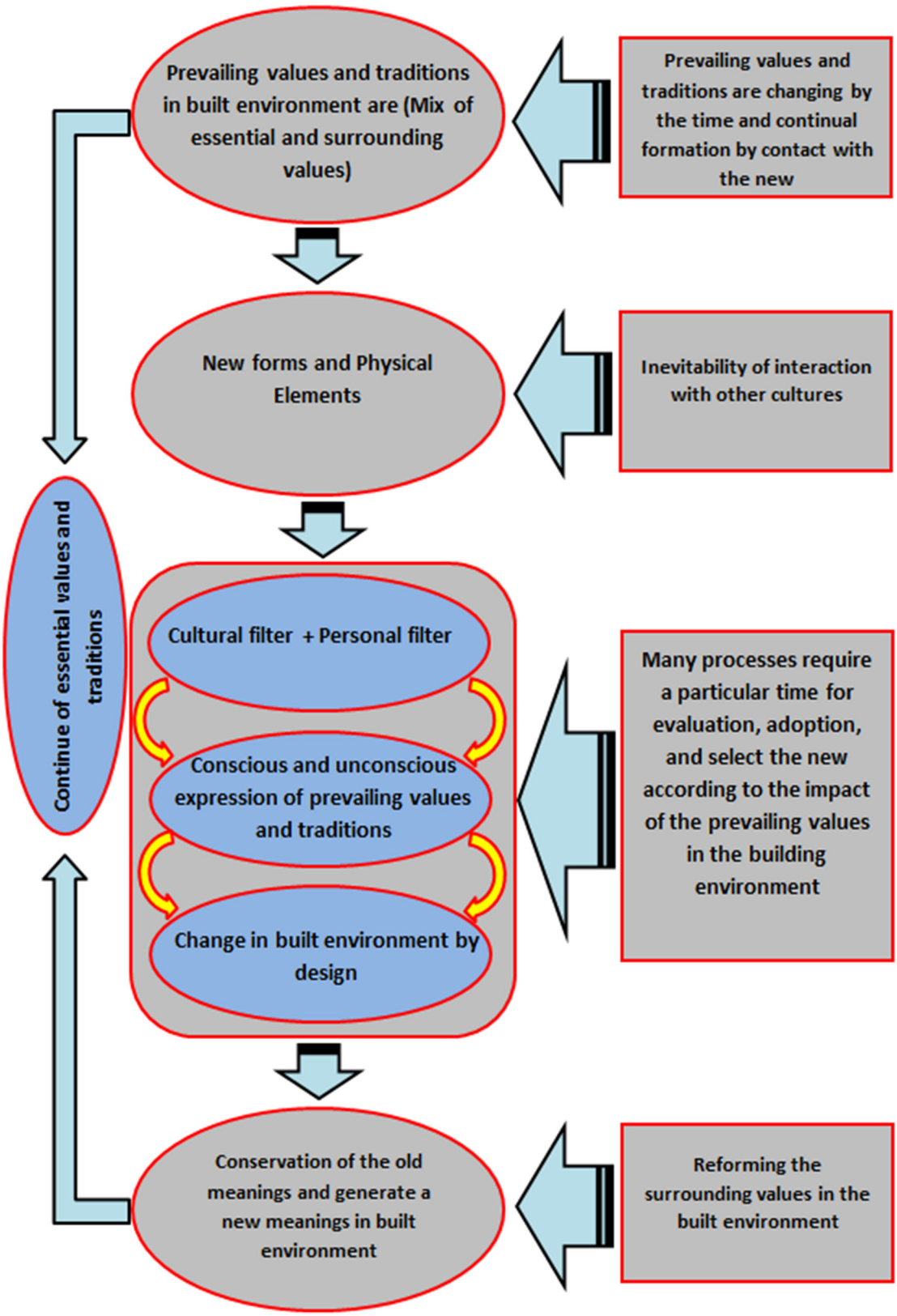


Figure 2-4: Spatio- temporal path for identity transformation (Al-Naim, 2001)

2.9 Globalization

2.9.1 Globalization and Background

Globalisation is one of the most important and discussed issue in the 21st century. The term Globalisation undoubtedly has affected all the parts of life of Humanity in the current century. Globalisation as a comprehensive phenomenon has influenced economic, political, social and cultural aspects of our societies (Mahmoody, 2012). There are different definitions of the phenomenon of globalisation but in spite of these definitions, this phenomenon cannot be conceptualised as a certain definition about which all thinkers have a consensus of opinion. "*Globalisation is a concept that refers to both world compression and aggravation of global awareness*" (Robertson, 1992). Or "*globalisation is time and space compression process by which people more or less will be relatively conscious consolidated in a single global society*" (Robertson,1992). Globalisation is a gradual and permanent process which has started in the near and far past and still continues, and the more its age increases, the more its speed and area enhances and the emphasis is on considerable increasement of communications and social, economic and cultural contacts which caused to increase the reciprocal dependency in the global area either consciously and voluntarily or inescapably and involuntarily (Mahmoody, 2012). These facts which continuously pump up consumption also create huge shopping centres and people crowding such centres. Furthermore, these centres become symbolical elements describing the cities through new forms of entertainment and recreation that globalisation creates, rather than their architectural individuality, or their contribution to city culture and citizenship awareness or their aesthetic characteristic (Baris, Uckac & Uslu, 2009). The problem is that "the mobility of people and the communication of information seem destined to develop without limits, and it appears that in whatever cultural context, there is, even more, demand for material reference points that provides continuity with past times (Parin, 2007).

2.9.2 Impact of Globalization on Identity

Globalisation does not represent the end of territorial distinctions and distinctiveness (Newman, 2013), but instead, globalisation broadens the scale of influences that affect identity and place, bringing together global and local influences (Larco, 2010). There are

two opposing forces behind architectural globalisation. One force seeks to safeguard and promulgate established indigenous architectural traditions, forms, decorative motifs and technologies. It advocates historical continuity, cultural diversity and preservation of geographic identity, all symbolised by a particular architectural vocabulary, just as spoken languages and local dialects impart identity (Lewis,2002). The other force promotes invention and dissemination of new forms using new technologies and materials in response to changing functional needs and sensibilities. It places a premium on systematisation, flexibility and interchangeability. As commerce, transportation, communication and information become globalised, it argues for internationalised, innovative architecture transcending local conventions and constraints (Lewis, 2002). According to (Koolhaas, 1996) globalisation "*expands the realm of possibility, for better or worse*" and "*exponentially depletes and enriches the architectural imagination,"* but furthermore it "*radically modifies architectural discourse, now an uneasy relationship between regional unknowing and international knowing."* Globalisation has no coherent singular identity with which to replace them as "Humanity isn't, in the relevant sense, an identity at all" (Appiah, 2007).

When the world becomes too large to be controlled, social actors aim to shrink it back to their size and reach: "*When networks dissolve time and space, people anchor themselves in places and recall their historic memory... These defensive reactions become sources of meaning and identity, constructing new cultural codes out of historical materials*" (Castells, 2011). At the same time, two apparently divergent forces have emerged: localisation and globalisation, one potentially atavistic and the other modern. "*Our biggest problem today is identity. With globalisation, it is difficult to identify exactly who we are and where we fit in space*" (Moussavi & Polo, 2006). The evidence suggests that a global architectural third culture has failed to use the skills and imagination at its command to provide ordinary citizens with any protection from the current threat that globalisation poses to their identity. The question of retaining local identity in a globalising world is central to the design of local space and place. It seems, however, to be a question that is beyond answering effectively within the practical and symbolic value systems that usually apply in the production of contemporary urban projects" (Parin, 2007).

Globalisation has tended to increase the sense of a fluid and fragmented self, particularly for persons who spend large proportions of their time in supraterritorial spaces, where multiple identities readily converge and create "lost souls". In more globalised lives,

identity is less easily taken for granted: self-definitions and associated group loyalties are much more up for grabs (Scholte, 2005). Hybrid identities present significant challenges for the construction of community. How can deep and reliable social bonds be forged when individuals have multiple and perhaps competing for senses of self - and indeed often feel pretty unsettled in all of them (Scholte, 2005). In this context, globalisation, rather than homogenising society, has been an agent of fragmentation. It has set in motion a break up of previously stable and established identities (Featherstone, 1995). The association of place with community or society is breaking down. The changing and choosing of the place are the model for biographical globalisation" (Beck, 1997).

"*In a world in which communication is becoming globalised, it is essential to maintain distinct cultural identities in order to stimulate the sense of belonging in a day-to-day manner to a specific society, as against the hegemony of universalist values, the defence and construction of distinctive identities on a historical and territorial basis is a basic element of the meaning of society for individuals*" (Borja & Castells, 1997).

Guido Martinotti identified the trend in 1994 *"Globalisation trends tend to homogenise cities the world over*" (Martinotti, 1994). Capitalism and globalisation are facts; their effects on the cities create the main changes and transformations through their effects on the way of living and cultures of the citizens and the socio-economic structure of the city. Another important and multi-dimensional problem relevant to the cities is the effects of globalisation on them. Globalisation, regardless of how much it may appear only as an economic fact, at first sight, is one of the means creating the most pressure of change/transformation on the cities (Schaafsmsa, 1998; Wilson & Grammenos, 2000). Facing the challenge of globalisation, Academia tends to view the physical elements of a city not only as a base of the city's redevelopment with respect to its historical settings (Kallus, 2001), but also as a generator of place identity in the cultural dimension (Castells, 1989; Hall, 2000; Hague, 2003). These approaches focus on the city's historical settings and its cultural significance, both of which find expressions in the forms of the city. The identification of physical elements in the traditional city is seen as the collective memory of place identities and localities (e.g. Rossi, 1982; Rowe &Koetter, 1984; Colquhoun, 1991). It is important when the traditional settlement is concerned with the physical features in order to contribute the authentic sense of place for the traditional cities facing the globalising world.

2.10 The International Conventions on the Preservation of the Cities

As the research aimed at maintaining the local identity while simultaneously enabling modernisation processes, and as the preservation of heritage and traditional buildings is an essential issue to revive the local identity of the place, it is, therefore, necessary to review the international resolutions on the conservation, restoration and regeneration of historic urban sites that were approved in the past century and beyond. The negligence of such documents may lead to a significant loss of components the World Heritage as well as to the obliteration of the local identities since heritage, including historic urban sites, represents for the peoples the memory of the past as well as their cultural legacy.

- **The Athens Charter for the Restoration of Historic Monuments (1931)**

After the damage that the First World War inflicted to so much of the architectural heritage, an international movement arose aimed at its protection through organised international cooperation. Within the recently founded League of Nations (1919), the Intellectual Cooperation Committee was established (1922) and, set in Paris, was later (1926) transformed into the International Commission for Intellectual Cooperation (CICI). In 1926, the Commission established an International Museums Office (IMO), and ceased to exist in 1946 with the creation of ICOM (International Council of Museums) and UNESCO.

IMO organised international conferences and carried out studies and publications on matters of international importance. In 1936, for instance, it produced a draft of Convention for the Protection of Historic Buildings and Works of Art in Times of War, then presented in 1938.

In 1931, thanks to these institutions, the International Conference for the Protection and Conservation of Artistic and Historical Monuments (1931) was held in Athens and the resolutions that it adopted were published as the Athens Charter for the Restoration of Historic Monuments, commonly known as the Athens Charter. It was the first charter regarding the restoration and preservation of historic monuments. It involved seven main resolutions which include the principles concerning the protection of the historic monuments, its legislative measures, the aesthetic addressing of monuments, information

regarding the restoration of the monuments, and the precautionary measures that must be taken to address the deterioration and the conservation techniques.

In 1931, the Athens Charter prescribed an approach to the monuments aimed at viewing them as historical evidence and thus at respecting the successive historical interventions on them, in so proscribing the “integrative” restoration of Viollet-le-Duc and his contemporaries, popular at that time, as well as any form of falsification of history by means of copying rather than solely studying the historic buildings. This concept was soon after incorporated into the Italian “Norme per il restauro dei monumenti” (Regulations for the Restoration of Monuments) of 1932, and inspired, in regard to the issues of conservation, Le Corbusier and CIAM (Congrès Internationaux d'Architecture Moderne) at the Fourth International Congress for Modern Architecture, held in 1933 , which resulted in the production of a text known as the Athens Charter of 1933 (as the Congress was held on board a ship directed from Marseille to Athens), a modernist urbanism charter which, despite the evident contrast with the restoration charter produced in Athens in 1931, shares with it the same aim to internationalise the debate on the crisis of the cities and the universality of the values of preservation and conservation of the architectural heritage

- **The Athens Charter (Charter d'Athenes) of 1933**

As mentioned above, the Charte d'Athenes (Athens Charter) of 1933 is the most famous manifesto of CIAM (Congrès Internationaux d'Architecture Moderne), the most renowned organisation of what is generally known as ‘Modern Movement’ in architecture, and was the result of the Fourth International Congress for Modern Architecture, held on board a ship directed to Athens in 1933, whose theme was "the functional city", as it focused on the importance of planning in urban development schemes.

The Charter was not published until 1943, and its influence was extremely relevant in Europe in the aftermath of the Second World War. One of the most controversial document ever produced by CIAM, it effectively committed it to the adoption of a rigid functionalism in the cities, which involved the choice of high-rise, widely-spaced, buildings separated by green belts. It also prescribed the destruction of urban slums, denying any potential heritage value to them, and recommended the creation of green areas to replace them.

Nevertheless, this charter included the urban ensembles in the definition of built heritage and put clear emphasis on the values (spiritual, cultural and economic) of the architectural heritage. Another aspect that should be noted is how it condemned the use of pastiche for new construction in historic areas.

More specifically, in regard to the historic heritage of cities, articles from 65 to 70 of the Charter are those which concern with it, more specifically:

Article 65. It explains how the city's personality is expressed by its architectural heritage, whether the individual buildings or the set of buildings, which, due to their historical but also sentimental values, must be protected from destruction, as they are part of the human heritage.

Article 66. It clarifies how preservation efforts should be aimed at historic buildings as they are expression of the past, nevertheless not any evidence of the past has the right to be conserved if it lacks a universal value and is somewhat injurious to the public interest, in which case he should be demolished, partially demolished or moved to another context.

Article 67. It elucidates how preservation of historic buildings should not entail forcing people to live in insalubrious conditions, as the cult of the picturesque is often an aestheticism that conflicts with social justice and solidarity. Ingenious solutions must therefore be sought after, to preserve the heritage while taking into account the need for healthfulness and well-being of the whole population.

Article 68. It proposes, nonetheless, to implement radical solutions to preserve the historic buildings if they are obstacle to the new traffic system created by the modern city with its expansion and new vehicles, and, rather than to demolish or remove the building, it suggests to seek measures to divert the traffic flow or even to transplant elsewhere the activities that leads the are to be congested.

Article 69. It proposes the demolition of the areas surrounding historical monuments if they are constituted of unhealthy houses or slums, seeing this destruction of age-old areas as regrettable but inevitable.

Article 70: It proscribes the use of pastiche buildings in historic areas, defining the method of using styles of the past in modern buildings as contrary to the lesson of history as

blending the “false” with the “genuine” results not only in a lack of authenticity but also in the discredit of the authentic testimonies of the past.

- **The Venice Charter (1964)**

The traumatic events of the Second World War had caused a large-scale reconstruction of the damaged heritage, the concern for which was the reason of The Hague Convention of 1954, which approved the Convention for the Protection of Cultural Property in the Event of Armed Conflict, issued in 1956. The need to update the Athens Charter, as merely listing and safeguarding the major monuments was deemed no longer sufficient, and the necessity of expanding the concept itself of monument, subsequently led to prompt the Second International Congress of Architects and Technicians of Historic Monuments, held in 1964 in Venice, Italy.

‘The International Charter for the Conservation and Restoration of Monuments and Sites’, commonly known as Venice Charter, is the first of the 13 resolutions adopted by the Congress, while the second resolution established ICOMOS (the International Conference on Monuments and Sites), which adopted the Venice Charter as its founding document.

A document of immeasurable historical importance, the Venice Charter defines the preservation of cultural heritage and its transmission to future generations as a common responsibility of the nations and all over the world it produced an impressive impact in the field of the conservation of cultural heritage.

It is constituted of 16 articles, some the most defining among which are:

• Article 3. Clarifies how historic monuments are not only works of art but also historical evidence, ¬the concurrently safeguard thereof is to be intended as the main aim of their conservation and restoration.

• Article 5. Clarifies how it may desirable to use monuments for purposes useful to the community, also in the case of a change of their function, as it aids their preservation as long as any modification entailed by this change does not affect their decoration or lay-out.

• Article 6. Explains the fundamental interconnection between the monument itself and the context within which it was built, thus recommending the preservation of the surrounding historic traditional setting and averting any demolition or new construction, as well as any modification that may cause an alteration of the relations of mass and colour.

- Article 7. Specifies that, due to the aforementioned tie between a historic building monument and its surrounding context, no monument should be separated from the setting wherein it occurs by being moved, even if only partially, to another setting unless if it is necessary for its safeguarding or in cases of national or international utmost importance.

- Article 12. Elucidates how any restoration carried out must avoid any falsification of the historical evidence that the monument represents and therefore how any missing part must be replaced by a new part that, albeit in harmony with the rest of the building, must never imitate the original bur rather be clearly recognisable as a contemporary integration.

At present, the Venice charter is still a benchmark for the member States of UNESCO in the field of identification, protection and preservation of cultural heritage.

- **The Rome Charter 1972**

Issued from one of the periodical conferences of CIAM, it aimed at achieving contemporary solutions while paying attention to the cultural aspects of both the city and society by rehabilitating and improving the urban space and the urban fabric.

- **The Rothenberg declaration 1975**

Focuses on the issues pertaining the preservation of the small historic towns. According to the resolution of the Fourth ICOMOS General Assembly (1975), many smaller historic towns have often not been involved by the industrialisation of the nineteenth century and thus have not expanded outside their historic cores, the landscape surrounding them was still intact and were still balanced and diversified in regard to population and employment, nonetheless they had started to be affected by emigration problems threating their survival due to the risk of abandonment and decay. The declaration aimed at highlighting the positive aspects of the small historic towns and at prescribing guidelines and strategies to protect them. (ICOMOS, 1975)

- **The Declaration of Amsterdam 1975**

The European countries agreed that European architecture is a common wealth for all European peoples. Accordingly, these countries pledged to cooperate to preserve the European architecture, including not only the individual buildings but also to the surrounding urban spaces, as a symbol of their common history and destiny. Furthermore,

it prescribes to improve the quality of the old neighbourhoods without introducing any major change in its social composition. (ICOMOS).

- **The Declaration of Tlaxcala1982**

The Third Inter-American Symposium on the Conservation of Building Heritage/ held in Tlaxcala, Trinidad, in 1982 and prompted by ICOMOS Mexico, focused on the issue of the revitalisation of small settlements. The declaration asserts the necessity of involving local communities in the decision process pertaining to their towns and villages and the importance of taking into account the local values and traditions also given the negative impact of non-traditional behaviour and consumption patterns introduced by the media. It recommends the use of local materials and building techniques and suggests the creation of courses in conservation of the vernacular architecture and in traditional building techniques. Furthermore, it promotes the improvement of the living conditions of the residents so as to encourage the revitalization of these small settlements, which is seen as fundamental that for their preservation. (ICOMOS, 1982)

- **The Declaration of Rome 1983**

Issued by the Italian National Commission for UNESCO, it aimed at focusing on the role played by multi-disciplinary approaches and sciences in the process of preservation and regeneration, and at recommending the necessity of a coordination between government, universities, technical institutions and all the bodies involved in the conservation of the architectural heritage, as well as the necessity of a specialised training for all those employed in the restoration field, thus prescribing the strengthening of institutions as ICCROM (International Centre for the Study of Preservation and the Restoration of Cultural Property).

- **The Lausanne charter 1990**

It's a charter aimed at the protection and management of the archaeological heritage, approved by the 9th General Assembly of ICOMOS held in Lausanne in 1990. It is an attempt to establish guidelines, inspired by the Venice Charter, against the threats to the archaeological sites and monuments worldwide, fostering the adoption of local legislations that may be effective in the field of protection and management of the archaeological heritage.

- **The Maastricht treaty 1992**

The parts of the treaty concerning environment and heritage aim at encouraging the sustainable development of the cities and at preserving the historical and cultural heritage. The European Commission also agreed to support the community's participation in the process of synchronising the sustainable development with the contrast to the damage to the architectural heritage and public places.

- **Colombo Declaration 1993**

The aim of this declaration, which was announced at the 10th meeting of ICOMOS, is to improve the level of education and training in the field of the preservation of conservation of monuments, groups of buildings ("ensembles") and sites. According to this declaration, preservation depends on the quality of the educational standards, and relates to economic, social and tourism-related aims in order to achieve a sustainable development. For this reasons it prescribes in each country the creation of an institute for research and archive that should record the local cultural heritage and be concerned with all conservation works related.

- **The Nara Document on Authenticity 1994**

Issued at the end of a conference held jointly by UNESCO, ICOMOS, ICCROM and the Cultural Administration of Japan, this document, also inspired by the Venice Charter, aimed at expanding the scope of the concerns for cultural heritage. It is centred on the definition of the concept of authenticity and specifies how no fixed criteria exist to judge the value and the authenticity of cultural property which must therefore be evaluated within the cultural context to which it belongs. Furthermore, it cautions against the negative aspects of globalisation and its dominance on local cultures and minorities, therefore emphasising the respect for other cultures, other values, and the tangible and intangible expressions that form part of the heritage of every culture. It also called for preserving and showing the historical memories of residents and nationalities through inherited historical cultural values. It emphasised that the cultural heritage of each society is property of all. This document reflects what the world has been witnessing of the influences of globalization in last three decades. Therefore, recommends preserving the traditional cities as a mechanism to avoid the negative aspects of globalisation.

- **The Declaration of San Antonio 1996**

Approved by members of the ICOMOS National Committees of the Americas meeting in San Antonio, Texas, in 1996 for an InterAmerican Symposium, this declaration, in the light of the Nara declaration on authenticity, focuses on the American autochthonous heritage that has not been entirely destroyed by the European colonisers in the Conquest Era by means of a persistent process of acculturation and its relations and interactions with the culture of these colonisers and that of the African slavery brought to the Americas. According to this document, the historical areas involve moral messages and rich social values which confirm the need for of preservation and sustainable development within cultural frames. This declaration strongly opposes the relocation of residents since it considered it as a tool to reducing the value and weakening the authenticity of the traditional fabric.

- **The Stockholm Declaration 1998**

Approved in the 50th anniversary of the Universal Declaration of Human Rights, it is mainly centred on the definition of cultural heritage as an integral part of human rights, calling for the participation of individuals and communities in the efforts aimed at preserving it and fostering cooperation between society, private sector and individuals in order to harmonise the development interests and the preservations efforts.

- **The Charter Of Zimbabwe 2003**

Adopted by the ICOMOS 14th General Assembly, Victoria Falls, Zimbabwe, in 2003, this charter deals with the challenges in diagnosis and restoration that limit the application of modern legal codes and building standards. The recommendations of the charter have been divided into three groups which are: general criteria, researches and diagnosis and remedial measures and controls.

According to the main general criteria:

- Value and authenticity of architectural heritage cannot be based on fixed criteria because the respect due to all cultures also requires that its physical heritage is considered within the cultural context to which it belongs.
- The value of architectural heritage is not only in its appearance, but also in the integrity of all its components as a unique product of the specific building technology

of its time. In particular, the removal of the inner structures, maintaining only the façades does not fit the conservation criteria.

- When any change of use or function is proposed, all the conservation requirements and safety conditions have to be carefully taken into account.

The second group of principles is concerned with research and diagnosis, as the process of restoration is similar to the process of medical treatment, which is achieved through the gathering of data and important information, the diagnosis and selection of remedial measures, and control of interventions. The third group is the remedial measures and control which emphasizes on the treatment of deep causes instead of treating only symptoms.

- **The Xi'an- China Declaration 2005**

The 15th General Assembly of ICOMOS convened in the ancient city of Xi'an-China in 2005: on the occasion, this declaration was produced, aimed at ensuring the conservation of the cultural heritage as part of sustainable and human development,

The meeting stressed the importance of the need to address adequately the rapid or incremental transformation of cities, landscapes and heritage routes which result from changes in lifestyles, development, tourism or large-scale disasters of natural or human origin, and protect the heritage through reducing the threat that the transformation processes constitute against the cultural heritage regarding its authenticity, meaning, values and diversity.

The Xi'an Declaration draws attention to the conservation of context, defined as the physical, visual and natural aspects as well as social and spiritual practices, customs, traditional knowledge and other intangible forms and expressions, in the protection and promotion of world heritage monuments and sites. It also calls upon a multidisciplinary approach and diversified sources of information in order to better understand, manage and conserve context.

The meeting adopted a set of principles and recommendations in order to protect and conserve the world's heritage structures, sites and areas. The main recommendations are the following:

- Acknowledging the contribution of setting to the significance of heritage monuments, sites and areas.

- Understanding, documenting and interpreting the settings in diverse contexts.
- Developing tools and practices to conserve and manage settings.
- Monitoring and managing change affecting settings.
- Working with local, interdisciplinary and international communities for cooperation and awareness in conserving and managing settings.

• The Quebec Declaration 2008

In 2003, ICOMOS had focused the scientific symposium of its 14th General Assembly on the theme of the preservation of social intangible values of monuments and sites. In the ensuing Kimberly Declaration, ICOMOS committed itself to taking into account the intangible values (memory, beliefs, traditional knowledge, attachment to place).

A meeting convened in Québec in 2008, on the occasion of the 16th General Assembly of ICOMOS, adopting a set of principles and recommendations to preserve the spirit of place through the conservation of tangible and intangible heritage, which is regarded as an innovative and efficient manner of ensuring sustainable and social development. The main themes of these recommendations are the following;

- Rethinking of the spirit of place.
- Identifying the Threats to the Spirit of Place.
- Conserving the Spirit of Place.
- Transferring the Spirit of Place.

To summarize; the review of the above international charters summarized some points that could enrich this research. The above charters emphasized the necessity of preserving the global architectural heritage and protecting the historical buildings as well as the artworks which have a historical value. It also stressed the need to revive the heritage areas and raise the level of health and achieving Welfare for the population.

The charters clarified how to deal with the heritage and traditional areas during the wars, and what are the negative impacts of the wars on the architectural heritage, which is consistent with the research topic and the research problem, as the city of Basra suffered from the effects of the three wars which created a serious threat to the cultural heritage of this historical city.

The charters emphases on proscribing any new buildings within the heritage areas, in addition to avoiding the demolition of any of the historical buildings and stressed the need

to maintain the relationship between the monument and the context which is in it. And called for preserving the tangible and intangible aspects such as customs and traditions within the context.

The charters have mentioned the importance of involving local residents and society in the decision-making process of their local areas as a matter of great importance issue. The charters, hence highlighted the importance of joint coordination between the government, universities and technical institutions.

The charters have warned against negative aspects of the phenomenon of globalization and its dominance over local identities. Therefore, the charters encourage using the local materials and traditional building techniques. They also recommend holding specialized training courses in the preservation of local architectural heritage.

The International charters stressed the need to develop guidelines against the threats facing the world heritage and adopt legal legislation to preserve the heritage areas, which consistent with the search aim that to develop guidelines to maintain the architectural identity and enabling modernization for the Basra city. As well as, the international charters called for the developing standards for assessing the validity of heritage, and stressed the importance of the documentation and data collection in the preservation processes. In this regard, the city of Basra was undergoing large-scale demographic changes, especially during the three wars, which had a significant negative impact on the identity of the city.

2.11 Summary

This chapter illustrated the concept of identity in built environment through reviewing the related literature. The chapter identified the essential aspects that connected with the notion of identity. The relationship between the people and the physical components that formed the built environment has clarified in depth, in addition the emotions, sense, memory and attachment of place have discussed since the place is considered as a significant factor in the identity issue. The concepts explored through the literature review allowed identifying key themes to be taken forward to develop the questionnaire and interview. Hence, the questionnaire and interview questions allowed the researcher to collect empirical evidence on how locals and experts understand different aspects of identity in Basra (i.e. tradition vs

modernity, the main factors influenced the identity, the influence of globalization on the local identity, the transformation of identity, the international preservation policies).

This chapter clearly revealed the need for the identity as a necessity for the human. Finally, the international charters and declarations regarding the preservation of the cities have reviewed.

Chapter 3: ARCHITECTURAL IDENTITY IN THE IRAQI URBAN ENVIRONMENT

3.1 Introduction

The concept of identity and the aspects related to it within the built environment have been discussed in the previous chapter. This chapter will, instead, examine the issue of identity in the Iraqi built environment and the factors that influenced its formation and its transformation. In order to achieve this aim, the chapter starts with a brief description of the historical background of Iraq and subsequently with the description of its local environment and the main components of which it consists.

Identity in Iraq has been deeply affected by the Islamic religion and its regulations, which had great influence on the Iraqi city planning. The political factor also played a significant role in the transformation that happened in the local environment, particularly, during the colonial period.

This chapter reviews the transformation of the Iraqi identity occurred in the twentieth century by elucidating the main trends of the Iraqi architecture and the main features of each of them. Furthermore, the chapter discusses the main components of the Iraqi identity, which are the traditional neighbourhood, the urban fabric and the courtyard house. In addition, it illustrates Modernity in Iraq and its features.

3.2 Historical Background of Iraq

As it is widely known, present-day Iraq coincides with roughly the greater part of the area once known as Mesopotamia, the Greek word (Μεσοποταμία) meaning "[land] between the rivers", used to designate the territory encompassing the basin of the rivers Euphrates and Tigris until the Arab Muslim conquests of the seventh century AD, when Arabic names like Syria, Iraq and Jezirah began to be used to describe the region. It is largely referred to as the cradle of Civilisation by archaeologists and, more in general, scholars of various disciplines (Martin,1962) (Moortgat,1963). The invention of writing by the Sumerians (2700-2400 BC) represented an event of paramount importance for Mankind.

During the period of Hammurabi, monarch of the Babylonian kingdom (1792 -1750 BC), the first legislation in the world was enacted (Martin, 1962). The Assyrians (1115 - 1077 BC), who lived in the north of Mesopotamia, played a main role in the history of the whole Middle-eastern region during the periods of King Tiglath-Pileser I, and after him, the kings Assur-nasirpal II, Shalamansar III, Sargon II and Ashur-banipal (668-626 BC), the latter of whom established the illustrious library housed in the royal palace of the capital city of Niniveh, the oldest surviving library in the world, which had among its holdings the baked clay tablets inscribed with the cuneiform characters telling the Babylonian epic poem of Gilgamesh, now in the British Museum (Fethi,1977). During the period of Caliph Omar (634 – 644 AD), Iraq was conquered by the Arab Muslims who established two new garrison towns, Basra and Kufa, the latter of which subsequently became the capital of the Caliphate, during the period of the fourth Caliph, Ali. In 762, the second Abbasid Caliph, Al-Mansur, chose a site few miles north from where ancient Babylon once stood and not far from the former Parthian and then Sasanian capital of Ctesiphon (taken in 636-7 AD), in order to build the “Round City”, that was the original core of Baghdad, intended to be the official residence of the Abbasid court and the new capital of the Arab Empire. In 1258, a landmark year for the Islamic world and not only for Iraq, Baghdad was destroyed by the Mongols under the command of Hulagu Khan, who attacked Iraq, laid siege to the city and overturned the Abbasid Caliphate, which was a great blow to the Arab civilisation, from that moment onwards fragmented into several different States. Two centuries and a half of turbulence followed. After the sack, Baghdad was part of the Ilkhanate, a breakaway state of the Mongol Empire, ruling from Iran. In 1401, the city was sacked again, this time by the Central Asian Turkic conqueror Timur ("Tamerlane"), and became a provincial capital controlled by Mongol (1401–1411) and Turkic (1411–1508) rulers and, eventually, by the Iranian Safavid dynasty. From 1509 the Ottomans staged a war against the Safavids, which ended with their conquest of the country and the triumphal entrance in Baghdad of Suleiman “the Magnificent”, the Sultan of the Ottoman Empire, in 1534. Basra fell in 1546. Over the next few decades, the Ottomans solidified their control of the region, incorporating it into their empire and dividing present-day Iraq in three “eyalets”, whose capitals where, respectively, Mosul, Baghdad and Basra. During their rule, there was almost no development regarding economic, agricultural and architectural aspects unless a few mosques which reflected the Turkish style. In 1917, the British occupied Iraq and divided it into three provinces called "wilayah" whose capitals where, respectively, Mosul,

Baghdad and Basra, as at the times of the Ottomans. In 1921, the Iraq became an independent country, and Faisal I was crowned as the first King of the Hashimite Monarchy in Iraq. However, the new State still remained under the British mandate until 1932, when it became a member of the League of Nations. Iraq became a republic in 1958 after the revolution that ended the Hashemite monarchy.

3.2.1 The Location

Iraq lies in latitude 44°14' E and longitude 33°14' N. The sea level altitude is 34 m, which is about 112 ft. Figure 3-1 shows the location of the country on the world map. Iraq borders with Iran to the east, with Syria, Jordan and Saudi Arabia on the west, with Turkey to the north, with Kuwait and Saudi Arabia to the south where a narrow strip of land gives it access to the Arabian Gulf.

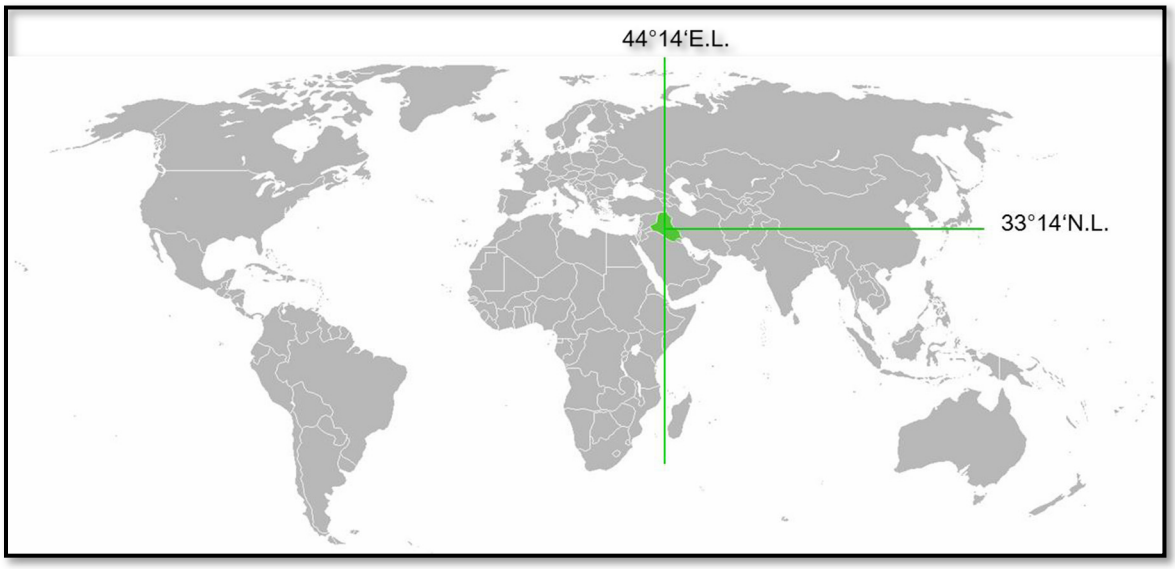


Figure 3-1: The Location of Iraq in The world Map

Iraq is a diverse country in regard to topography and climate. Accordingly, three main different regions in Iraq can be identified. In the north, there are mountains, with a constant cold weather, in the south there are green forests and marshes, in the west is the desert, which covers about 60 percent of the country and is characterized by dry and hot weather for most of the days of the year.

There are two main rivers in Iraq, which are Tigris and Euphrates. They merge at a confluence to the north of Basra, creating the river called Shat Al-Arab, which flows into

the Arabian Gulf. For this reason, in Antiquity, the country was called with the Greek word "Mesopotamia", which means the land between the two rivers.

3.2.2 The Climate

Generally, the climate in Iraq is hot and dry in the summer and cool and rainy in the winter. The range of temperatures in Iraq during the summer is very high as it spans from 45° C to 55° C in July and August, while during the winter it spans from 0° C to between -4° C and -8° C, particularly in December and January, as in Figure 3-2. The winter in the north of Iraq is relatively longer and colder than in the other regions, while the summer is longer and hotter in the south. For some years now, Iraq has become one of the countries with the highest temperatures in the world, especially in its southern region. Accordingly, the traditional habit that Iraqi people had to sleep on the roofs of the houses during the summer nights became increasingly common again after 2003 due to the lack of electricity supply caused by the damage that the electric power stations suffered during the past wars.

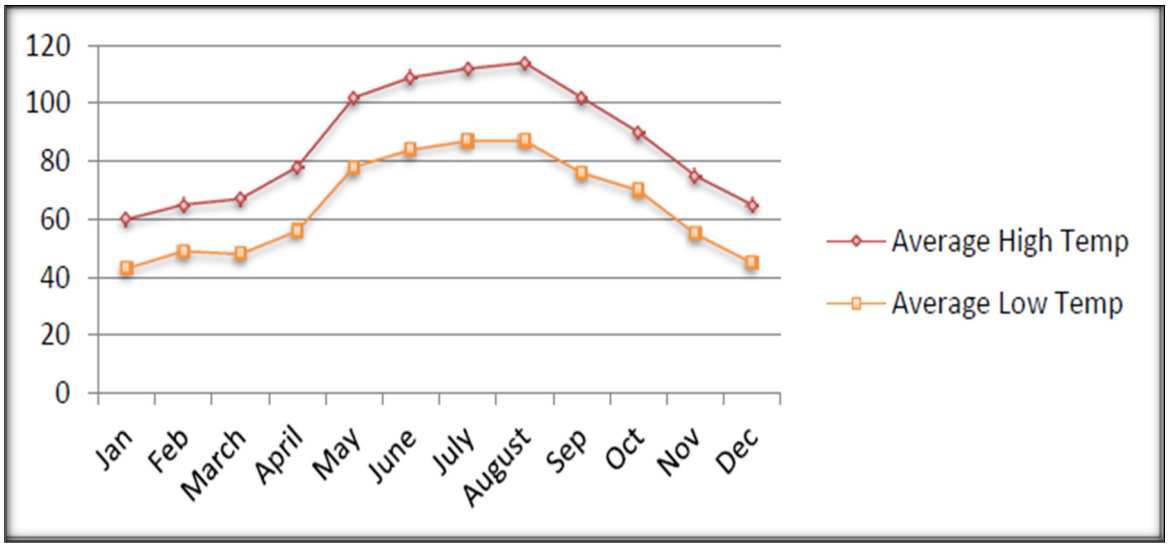


Figure 3-2: Temperature average in Iraq

Generally, the average of relative humidity in most of Iraq is low: between 30% and 15% during the summer and between 70% and 30% during the winter. This is the common average in most of the country except in the south, where the impact of the Arabian Gulf in addition to the proximity of the area of the marches region leads to an increase of humidity, as shown in Figure 3-3.

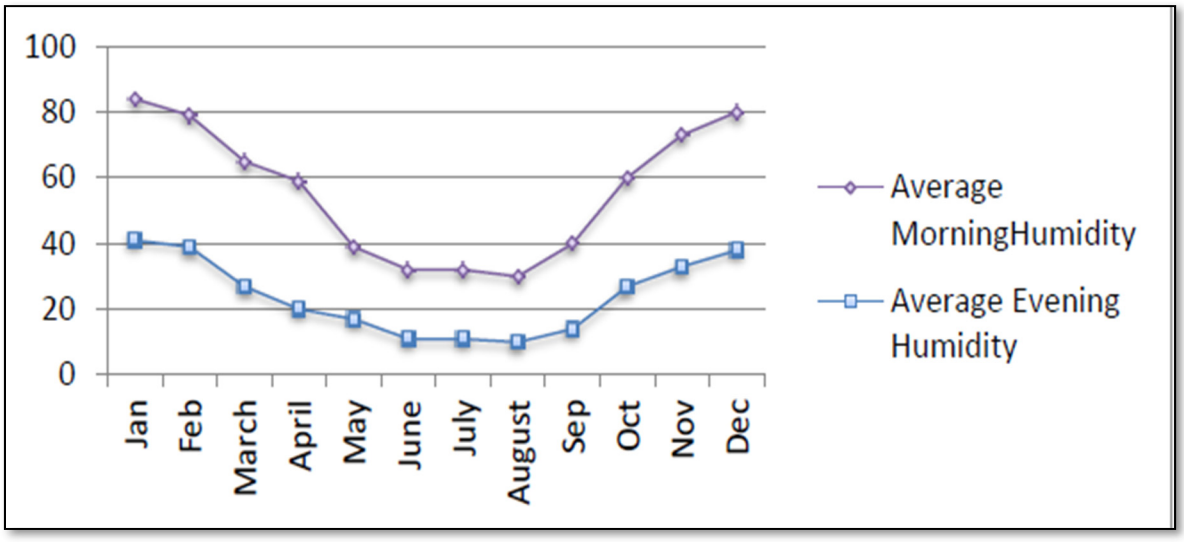


Figure 3-3: Average of relative humidity

In regard to the air currents, the prevailing wind throughout the year in Iraq is a dry seasonal wind, which blows from north-west to south-east. It is a dry and dusty wind since it passes across the desert heating the land surface during the day, while bringing cool air at night. This south-easterly wind in some days of the summer causes high humidity as it comes from the sea with a speed reaching about 80 Km per hour.

In regard to the rainfall, Iraq is considered a semi-arid country but there is, however, a rainfall amount, particularly in the winter, usually with a maximum intensity from December through March. The annual rainfall in most of the country is of about 150 mm, as clarify in Figure 3-4.

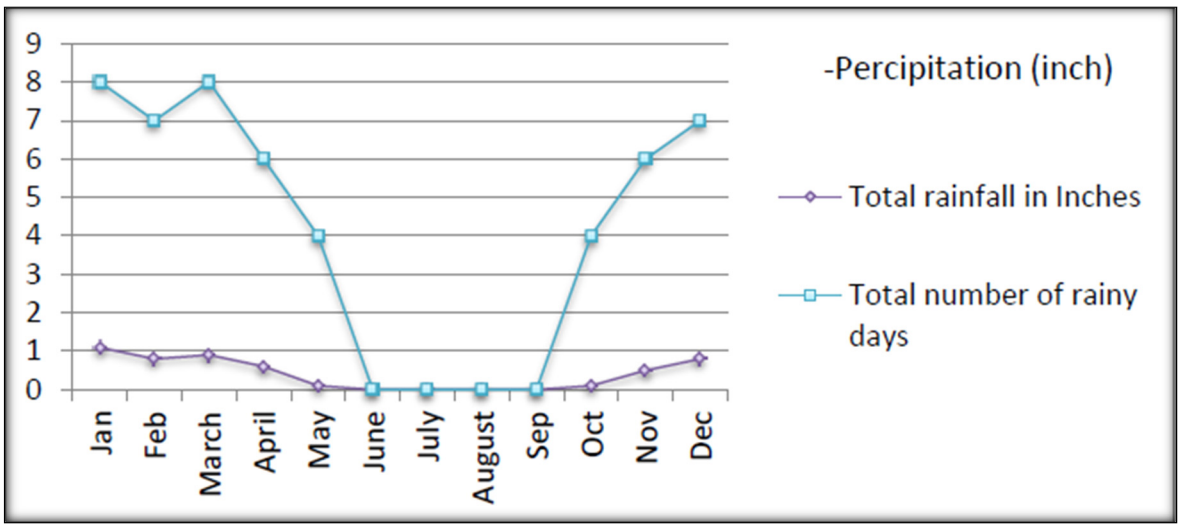


Figure 3-4: Monthly average Precipitation in Iraq

3.2.3 The Heritage

The concept of heritage is very complex, but nonetheless not hard to understand. According to one of its definitions, heritage represents all the styles and traditions handed down over time from the old generations to the young generations, therefore reflecting their collective identity. According to Hewison (1987), anything valuable that is preserved and transferred to the next generations can be defined as heritage. The urban heritage, as defined by Masser et al. (1992), is the continuous process of handing down something from the past to future generations. The heritage is often used to have a clear vision of history. Manley & Guise (1998) pointed out that the recent architectural development of most of the cities in the world created the concept of heritage, which was not familiar before the historical buildings of these cities began to be threatened. The World Heritage Committee in 1984 considered heritage as the main source of the formation of identity; thus, it determined the preservation of all the places, areas and buildings having a high universal value as its aim for future years (Suraiyati, 2012). The understanding of the value of the heritage depends on the relationship between identity and heritage, which also gives an idea about the problems facing its conservation (Al Sheliby, 2015). To create a suitable architecture meeting the human needs of the era, it is necessary to borrow elements from the heritage. Nevertheless, using the vernacular elements might be very critical for the issue of identity. This has been stated by Zarzar (2012) as he referred to the importance of using vernacular elements belonging to the specific local heritage for any specific region. The relation between local environment and architecture should be respected as it is regarded as the base of success for architecture everywhere, which means that transferring the architectural elements of a given context to different places is seldom a successful operation. At the same time, importing uncritically from the past the architectural elements of the local environment with no consideration for the new era would not be either logical or successful. It is, therefore, fundamental to seek a balance between the needs of the current era and the local heritage in order to create an architecture that satisfies the needs of the local residents socially and environmentally. The loss of the historical monuments at any time will result in a disconnection of future generations from their history therefore causing a lack of knowledge in regard to their cultural heritage and a consequent weakening of identity.

Iraq can be regarded as one of the main centres in the world for archaeology as it has around 7000 archaeological sites according to the 'Guide to Archaeological Sites' issued by

the Iraqi government in 1970 (Fethi, 1977). The country has a long history that extends back to Antiquity, therefore it owns an extremely rich cultural heritage: it was the cradle of many civilisations of ancient Mesopotamia such as the Sumerian, the Assyrian, the Babylonian, the Akkadian and the Abbasid. Accordingly, the monuments of these ancient civilisations can still clearly be seen all over Iraq. Some of these sites and monuments are within the urban areas, thus facing serious dangers concerning the development processes of these areas along with other threats such as wars and neglect (Fethi, 1977). Moreover, the use of bricks made of clay rather than stone, due to the rarity of the latter in the Mesopotamian area, is another threat to the preservation of the Iraqi architectural heritage, given the more perishable nature of such material.

The most prominent monuments still extant and which best represent the traditional heritage are the historic cities, particularly the traditional neighbourhoods, which later became the cores of the present cities. However, rapid development poses a serious threat to these cores because of the growth of the commercial areas within them, occurring to the detriment of the residential areas. Many of these heritage areas and neighbourhoods still represent the core of the main cities of Iraq such as Baghdad, Mosul, Kirkuk, Najaf, Arbil, Karbala, Samarra and Basra as well, to the extent that many people still live within these historic areas (Polservice, 1972). Most of these cores were surrounded by walls that served for the purpose of defence. The sudden demolition of these walls, as Fathi (1977) refers, represented a sign of openness to the world, but at the same time it constituted the beginning of the death of these cities since it allowed a wide expansion outside the traditional areas.

3.2.4 The Culture

The term culture refers (Altman, 1980) to "that body of principles, cognitions, feelings and behaviour shared among a group of people in several ways". According to Al-Jabri, culture is the homogenous mix of memories, values, symbols, expressions, innovations, and ambitions that maintain the dynamics whereby a society communicates and develops (Al-Hamdani, 2005). Accordingly, it is an expression tool by means of which society describes itself. For Bourassa (1991), symbols play a key role in cultural groups to achieve identity. In this regard, any culture, in order to represent itself, needs to create a symbolic system that may reflect it. The symbolic forms not only build the identity of a culture, but are also

an essential issue to maintain that culture. Kroeber has supposed that culture has a dynamic in nature, and he divides it into three groups, which are: social culture, value culture, and reality culture (Silverman, 2004). The evaluation of cultures might be different in regard to the same issues as every culture is related to a place. For instance, architecture throughout the Middle East has mutual similar traits, yet there are regional differences that are easily detectable (Al-Numan & Al-Tahlawi, 2008). These differences may be attributed to the availability of natural resources, predominant technological systems, and suitability of regional styles to contemporary needs and values. The cultural variation between communities derives from the differences in the common regulations of each community. Those regulations have been set through processes of trial and error that gave to each of those communities its unique experiences and ultimately have transformed these rules into traditions (Al-Numan &Al-Tahlawi, 2008). Religions also contribute to set regulations and guide communities. Their role was stronger in primitive and preindustrial cultures as religion was an essential part of them (Rapoport, 1969). One of the most effective roles of religion is the creation of symbols, which had a direct impact on architecture. Thus, to draw the relationship between culture and place identity, I will go through each of the aforementioned main components of culture (traditions, religion, and symbols). Generally, there are many factors that may influence cultural identity: accordingly, identity may be modified or replaced. These factors are not the same for all but rather differ one from another depending on the case and the area. In regard to the Iraqi case, many factors have affected the local cultural identity, such as a colonialism, wars, diversity and so on. However, the discovery of oil reserves in the twentieth century constitutes the main factor, as it contributed to change the cultural identity of the local society in a dramatic way.

3.2.5 The Religion

Religion is regarded as one of the most influential factors for society and lifestyle as it represents an essential base for cultural identity (Haft, 2005). It is also considered as the main source for the spiritual needs of the humans. The religious rituals and worships play a significant role in the formation of the buildings. In earlier stages of history, the coherence of a society mainly depended on the role that the temples of the city played in it (Al-Kaissi, 1984).

The Islamic regulations were considered as guidelines to organise relationships for people and society, therefore, the Muslims had to comply with them. The house of a Muslim had

to meet a number of requirements of the Islamic theory, such as encouraging the social interaction, providing a high level of privacy, reflecting the concept of paradise through the imitation of some of its features within the house such as water and plants. The values, traditions, ideals, and norms of a society are all productions of the religions that were prevailing in a given era. Accordingly, they have formed different societies in different ways. However, in all the premodern societies, there were solid ties connecting religion with social life in a similar way for both Christians and Muslims (Brown, 1970). The core of the European cities of the Middle-Ages was created according to the regulations of the Church, which represented the spiritual authority for the society of that time. Similarly, the Islamic cities, were created accordingly to the regulations of the Mosque, which was the spiritual and political authority (Al-Kaissi, 1984). Moreover, the Mosque played an educational role in the Islamic society, since it was used for educational activities in addition to the social aspect as, more specifically, its internal courtyard was a space where people could meet.

3.2.5.1 The principles of Islam

Islam is not only a religion: it represents an approach to life, it is a complex system including many issues such as religion, philosophy, politics and social values. Accordingly, Islam has developed an ideology, which derived from the Quran and the Hadith, which is the collection of Prophet Mohammed's sayings. This ideology clarified the principles of the life of a Muslim as the lifestyle, the regulations and laws, the rights and duties, and so on (Bamborough, 1976). Over the centuries, the principles of Islam have been integrated by people within the social aspects, which resulted in subsequent, further values and rules to construct their built environment (Al-Sheliby, 2015).

The architecture of the Islamic cities is influenced by the principles of Islam, which are derived from the holy Quran which is regarded as the main source of the regulations defining the right way of life for a Muslim. The general secretary of "Aga Khan Award for Architecture", Suha Ozkan, has attributed the developments of contemporary architecture in the area of the Middle East to the values of Islam, as he stated that "*There are examples of architecture conversant with the values of Islam, and that the region has been fertile ground for the development of some of the finest expressions of contemporary architecture*" (Ozkan, 2002, P.86).

The ideology of Islam mainly refuses luxury in housing, as it deems luxury as an expression of pride or arrogance, which are in disrepute in the Quran. Therefore, most of the Islamic cities used to feature simple houses except for some rare cases (Planhol, 1959). The Islamic philosophy focuses on balancing consumption in regard to the availability of wealth and natural resources: therefore, it encourages people to avoid wastage of wealth (Al-Zubaidi, 2007). The principles of Islam have been often used to find solutions to planning and architectural problems in cities and neighbourhoods. Hakim (1986) has mentioned some of the problems to which the Islamic regulations and laws have played a main role in providing solutions, and they are: problems pertaining to the road network and circulation, the problem pertaining to the position of windows and doors so as to provide privacy, problems pertaining to noise and acoustic isolation and the problems related to the rights of water usage and water draining as well as to common walls (Shawesh, 2000). Islamic architecture has focused on function within the spatial context. In the Islamic architecture, the form has been expressed through time in an unconstant way according to the mutations of time and place, while, by contrast, the content was always constant. So, the content must be considered as the essential base for the architectural theory in an Islamic perspective.

One of the most significant issues identified by Islam is privacy, which is considered of paramount importance for the Muslim lifestyle. Therefore, it must be respected by the others and must be well preserved within society, in general, and within the house, in particular. In addition, Islam has put emphasis on the strength of the relationships between people in order to build a coherent society, which can be achieved by means of the unity and cooperation between the members of the society (Al-Zubaidi, 2007). Moreover, neighbourliness and the relations between neighbours are considered, in Islam, as the bedrock on which a healthy society is built: accordingly, Islam has developed many rules and regulations to organise and control these relations. Islam has given utmost attention to the family, as it represents the basic unit of society for the Islamic ideology. In this regard, the relationships within the family represent an important issue (Mortada, 2003).

Islamic architecture is based on the concept that religion is the main organiser of life: both the life of the individual and of society. According to that, the interior and the use of the building pertains to the Muslim individual, while the exterior pertains to the Muslim community which is governed by equality, neighbourliness and solidarity values, as well as economic values that shape the basis of the community. The external form of the

building is determined by the general values of society, whilst the internal form depends on the individual values (Dujaili, 1999).

3.2.5.2 Traditional architectural and Islam

The influence of Islam can clearly be seen in the homogeneity of the social and physical aspects of the Islamic neighbourhood. The prophet Mohammad put much emphasis on the kind treatment of the neighbours, as he said to always respect the forty neighbours, which is interpreted as a clear advice to encourage people to live as a community (Al-Sheliby, 2015). Islam has focused on unity and averted differences within society. This has been reflected in architecture through the design: for instance, the facades of the houses were very simple and devoid of ornament. The uniformity in the facades regarded all the design aspects such as materials, colours, height and shape. The harmony within the Islamic neighbourhood can be found in all the components, even the relationship with nature. In regard to this point, Nasr has referred to the relation of Islamic architecture with nature as he said: "*Islamic architecture remained faithful to simple building materials and employed the elemental forces of nature such as light and the wind for its sources of energy. It brought nature into the city through the recreation of the calm, harmony, and peace of virgin nature within the courtyards of the mosque or the home*". (Nasr, 1978, P13). The main features of the Arab Islamic city can be summarised as follows:

- Use of local building materials.
- Hierarchy of spaces and movement.
- Organic urban fabric in the residential areas.
- Environmental adaptation and climatic suitability in planning and urban design.
- Influence of social customs and traditions in the planning, so that the city has been distinguished by privacy, organic shape, and centrality of the mosque (Ragette, 1980).

3.2.5.3 Globalization in the Islamic Context

The Arab world before Islam was nothing more than a number of split tribes in the Arabian Peninsula without anything in common apart from instability, which indeed was their prevailing feature. Therefore, Islam emerged as a new ideology, unfamiliar at that time, as it reshaped and unified many divided nations and tribes, which could be considered as a creation of new sense, in way similar to the new sense created by

> globalisation presently. Within few years after the rise of Islam, the Arab civilisation became one of the greatest in the world, reaching an extension which entailed aspects partially homological to present-day globalisation. (Bennison, 2002).
>
> There are many evidences that referred to the concept of globalisation in Islam, most of which can be found in both the Quran and the Hadith of the prophet Mohammed such as the say of the prophet "*I was sent to all Mankind*".
>
> In his comparison between Islam and current globalisation, Al-Jaberi has mentioned that a significant difference between them is that the Islamic perspective, in regard to globalisation, is aimed at creating an identity by improving and developing the Islamic traditions in order to satisfy the contemporary human needs, nevertheless never imposing these traditions on others. (Abuzaid, 2007)

There are two different attitudes in the Arab Islamic society towards globalisation, which are: reject and support. For the first stand, globalisation is a foreign trend aimed at ignoring or marginalising the identities of all the societies under the umbrella of a homogeneousness that is cultural flattening. Thus, it is for them an untrustworthy western thought, often judged according to the parameters of conspiracy theories. For this reason, resistance against globalisation is encouraged in order to preserve the local identity (Said, 2002). Most of the followers of this stand support and concur with the writings of Roger Garaudy, who was among the earliest writers who cautioned against the impact of globalisation on the other societies and aimed at exposing the supposed western attempts at controlling the world and, in particular, the weakest countries. In his book "Dialogue of Civilisation" Garaudy has cautioned the Arabic countries against believing in what he deemed western fake claims such as globalisation, democracy and secularism, which are, as he described them, a mere theft of the achievements of others (Garaudy, 1977). Similarly, Abuzaid (2007) has explained the hidden agenda of globalisation, which he considered as the new language of Capitalism, aimed at controlling the world by re-organising it into two categories; power and consumer.

The second stand sees globalisation as the best way for the Arab Islamic society to achieve development and catch up with the world. For its proponents, it represents a high rank school of thought, able to offer the ideal solutions to the problems of the Arab societies (Said 2002). In this regard, Bakaar (2005), determined two positive points for globalisation, which are, firstly, the fact that globalisation represents a good reference for

testing and evaluating the cultures of different societies: accordingly, the Arab society could benefit from the huge information offered by globalisation to interact with other experiences and learn how they succeeded in retaining their traditional values via a successful way of rethinking. Secondly, globalization could provide the possibility to achieve a better life, by improving the way of thinking of people thanks to the contact with the global thought at its highest levels as it can be reached in an open world. According to this stand, for the Arab architects there is an opportunity to benefit from globalisation to maintain the traditional identity of their societies by developing creative way suitable for this issue.

3.3 The Iraqi Architecture

The traditional Iraqi Architecture differs from the architecture of other countries thanks to a richness of elements that are in harmony with the specific climatic and social conditions of the country. In his general study on the source and the references of shapes in traditional architecture, Gelernter states that the building pioneers worked according to a principle of trial and error, then, through succession phases, acquired the expertise that allowed them to develop architectural forms in harmony with the climate and the social system: anytime they failed, they tried to find the most efficient alternative, and, as soon as they succeeded in finding one, they handed it down to the subsequent generation as a pattern (Gelernter, 1996). The local environmental and social factors have constituted the main influences for the design and the planning of traditional architecture in Iraq, from the large scale to the smallest detail. For instance, the traditional Iraqi house is characterised by distinctive features that are appropriate to the local climate and the social aspects, in so representing an ideal solution providing the Iraqi family with an indoor environment of absolute privacy (Warren, 1982).

The traditional Iraqi architecture has suffered the introduction of foreign practices, which resulted in a large influence of the Western ideas and concepts on the local society. This effect can clearly be seen in the unconscious adoption and imitation of global trends and patterns in a complete disregard for the benefits of the local building tradition and cultural heritage.

3.3.1 Transformation of the Iraqi Architecture in the 20th Century

3.3.1.1 Colonial Era 1914-1930

The period subsequent to the British occupation of Iraq (1914-1918), from the independence until the Second World War, was of paramount importance in the Iraqi architectural history (Chadirji, 1982). It was marked with the adoption of different architectural styles of foreign origin as well as with the use of new construction materials never used earlier in local architecture, so as to meet the requirements of the newborn State which, still in the making, lacked both the appropriate buildings to house its institutions and the infrastructures necessary for a modern and independent country (Al-Sultany, 2000).

Accordingly, in this period, different buildings and infrastructures were created which were not known in the past in the country, such as the airport, the Government House, special circuits for mail, telegraph and telephone, several cinemas, along with many other facilities (Youssefm,1982).

The major themes that have influenced the architecture in Iraq after the British occupation are:

- Persistence of the distinctive features of the Iraqi architecture prior to the British occupation in the architecture that followed the occupation and the establishment of the independent State. It is possible to sense an overall continuance in the architecture treatments and in the use of the materials, which were those already prevalent in the traditional Iraqi buildings.
- Emergence of a modular design unit aimed at creating a connection between Iraq and the other Arab countries in spite of the regional differences in architectural forms, also taking into account the many similarities that nonetheless already existed, due not only to the common socio-economic factors but also to the climate and building materials (Al-Khafaji & Al-Kaissi, 2012).
- The cultural background, approach and goals of the English architects who occupied senior positions in the institutions of the new Iraqi State after its inception, and, previously, during the occupation period. They designed and constructed many multifunctional buildings, which the newborn State needed, and focused on maintaining the classical styles, rejecting the new currents (Al-Sultany, 1982).

- Reinterpretation of the policy carried out by the British in India, aimed at creating a specific architectural style, through a selection process of the elements of the local architectural heritage. Many English architects who worked in Iraq in the period between the wars, such as Colson, Mason and others, had previously worked in India, and, for this reason, their influences were clear on the local architecture in Iraq (Al-Sultany, 2000).

All the factors above had a clear impact on the Iraqi architecture in the period between the two wars, and can clarify the design techniques of the buildings erected in the country by the British, which are devoid of any trace of understanding or awareness of the importance that the architectural heritage and the local techniques and building tradition held. Consequently, the style of this period was later called "Colonial architectural style (Al-Sultany, 2000).

Figure 3-5: Aal Al-bait school – Baghdad 1922

It should also be noted that for the design of the facades of the edifices built by the British, a European Neoclassical style was adopted, to the extent that many of them were copied from British buildings (Chadirji, 1985).The designers opted for an extreme complexity in the external form of the buildings, for the use of many materials, including luxury ones, that had been previously unknown in Iraq, as well as for decorative elements belonging to diverse and conflicting architectural styles forced together in the composition of the buildings.

The buildings erected in this period were conceived as isolated entity after the fashion of other classical buildings hence according to design patterns which did not take into account either the features of the surrounding site or its architectural specificity, in so doing being detached from the rest of the urban landscape and not having any positive impact on it.This is due to two reasons:

- Scant architectural, technical, and historical value of the neighbouring buildings, which allowed the designers to ignore and neglect the surrounding environment.
- An architectural practice based on the conception of edifices as single, isolated compositions, designed according to foreign stylistic parameters, as it is clear, for instance, in cases as the Royal Court, the Women's College (1925) and the Royal Hospital (1934), all in Baghdad (Abu Khaldun, 1967).

A significant feature characterising the buildings of this period is the emphasis put on the main facade, where the richness of the architectural details was concentrated, whilst the other elevations of the buildings were left almost or completely shorn of any ornament.At this stage, the global architectural practice had created new trends based on the interconnection between the pre-design or the attractiveness of the pre-planning and the characteristics and knowledge of each architect, to the extent that gathering the difference between them became very complex or even impossible due to the difficulty of knowing which one has affected the other: the characteristic of the architect or the attractiveness of the pre-planning. Accordingly, this stage has been deemed the beginning of modern architecture in Iraq (Al-Asadi, 1996).

3.3.1.2 The Architecture in Iraq 1930-1950

The architecture of this period was a continuation of the new architectural concepts that had emerged earlier on in the third decade of the century, although an interpretation of these concepts and ideas was carried out in order to channel them into the tangible urban environment: in other words, if the 1920s were the spring of the new architectural thought that had embraced the values of Modernity, the architecture of the 1930s was the maturation of such thought (Al Silq, 1989).

Figure 3-6: The Industrial Exhibition in Baghdad – 1932

Although in the 1920s the architectural practices had involved an overlapping of traditional construction methods and new architectural styles, and not seldom even a confliction between them, the urban environment of the 1930s was distinguished by a general aspect of pure and clear homogeneity due to the adoption of the modern architectural language. Thus, what had been difficult to achieve and had been deemed as strange in the 1920s, had become real, familiar and even ordinary in the following decade (Al-Sultany,1975). The need to create edifices to house the new governmental institutions led to the construction of a great number of them, which enriched the urban landscape by means of monuments and landmarks whose forms were not known before (Al-Zubaidi, 2012).

A significant aspect that accelerated the creation of a new urban built environment in the 1930s was the presence of institutions specifically aimed at organising the building process and improving its quality. The role of these institutions was not only that of monitoring the construction process, but also of offering suggestions and recommendations that eventually led to the enactment of laws and regulations which played a key role in the creation, arrangement and organisation of a new architectural environment, such as the Municipalities Law of 1931 or the code for buildings and highways issued in 1935, which is considered as a reference for all the subsequent building codes, due to its significant impact on architecture and construction in Iraq. (Al-Sultany,1975). The main feature of the Iraqi architecture of the 1930s was the emergence, for the first time, of a significant presence of Iraqi architects in the design process: Ahmed Mukhtar Ibrahim, the first professional and academically qualified architect, arrived from

the UK in 1936, and was then followed by a large number of Iraqi architects such as Hazim Namik, Jaffar Allawi, Abdullah Ahsan kamal, Medhat Ali Madhloom, and Sami Kirdar (Youssefm, 1982).

Figure 3-7: King Faisal II Square - 1944

Figure 3-8: The central Train station in Baghdad 1949

To summarise, the fourth decade of the 20th century represented such a significant period in the evolution of modern architecture in Iraq, that it can be considered an establishment period, because it was clearly distinguished by a marked homogeneity of design

language.However, this language, in spite of its modernity and the fact of representing a new trend compared with what had been built earlier, remained related to a neoclassical style, still rooted in the architecture of the mid-nineteenth century.

3.3.1.3 Iraqi Architecture between 1950 and 1960

A significant originality distinguished the Iraqi architecture of the aftermath of the Second World War and of the 1950s, to the extent that this period represented a pioneering architectural period. The issues of the identification of the architectural periods and of the transformation of the architectural styles are no easy task and also require intuition. It is difficult to determine the exact beginning of a style in architecture. Accordingly, in modern architecture, ascertaining the specific moment of birth of a new style is generally complicated and relying on approximation (Al-Sultany,1984). Nevertheless, the case of modern Iraqi architecture is different: there was a clear disconnection from the previous production, which entailed not only the adoption of modern architectural components, but also a whole change of the types and of the architectural scale of the buildings, as well as a change in the choice of the building materials (Al Silq, 2011).

Figure 3-9: Al -Rafidain Bank – 1954

In the beginning, particularly in the 1930s, the modern ideas in architecture, had seemed to many people as an attempt to deform the bases of architecture. The refusal of the

architectural forms which had been holy for such a long time, the rejection of the classical architectural approaches and tools, the overuse of complexity and ornamental richness on the facades, were a shock for all those tied to the traditional architectural styles and their concepts (Nooraddin, 2004). The attempts of the young architects to introduce a new architecture had to face a great opposition due to the conservativism of both the employers and of the local society, besides the criticisms of many architects still attached to tradition. Along with that, the lethargy of the building activities of this period, led many new architects to focus on pursuing a thorough process of examination of the local materials and, more in general, of the specific character of the Iraqi environment, channelling it into a professional architectural vision. It was also a period in which many of them had the chance to get in touch with the foreign architects who were working in Iraq. (Izz Al-Din, 2001).

Figure 3-10: Merjan Building - 1954

In the 1950s, circumstances suitable for an architectural development occurred, since the Iraqi cultural landscape in Iraq changed rapidly during these years, as reflected in other creation fields such as drawing, poetry and literature (Al-Sultany, 1984). In this period, there was a significant development in the techniques of finishing the facades of the buildings, such as the use of covering them with plaster, either made of a mixture of lime and sand or made of a mixture of cement and sand. The spread of this phenomenon led to serious repercussions in the design style of the facades (Shirzad,1987). Another new

feature that characterised the buildings in this decade was the introduction of some new architectural elements, such as curtains and screens made of different shapes and material for the finishing of the buildings (Al-Sultany,1984).

3.3.1.4 Iraqi Architecture between 1960 and 1980

In this period, which ensued the one that established a special and unique character for architecture in Iraq, the modern architectural treatments were focused on establishing and deepening such a character, through a careful examination of the specificity of the local environment and through a conscious use of the vocabulary developed in such environment, which was related to the local climate and the local materials, along with the employment of local traditional craftsmen to erect the buildings, so that the designs of the Iraqi architect, in this period, became more professional than before (Al-Sultany, 1985).

Figure 3-11: AL-Rashid Street in Baghdad -1961

In fact, not only did most Iraqi architects have the aim of finding solutions for the problems of the architectural components in their designs, but also the ambition to make their architectural products an effective tool apt to enrich the national culture and capable of being a significant tool to build the future (Al-Asadi, 1996). On the other hand, other architects followed other parameters, resorting to the vocabulary of modern architecture, rather than to the traditional one, in order to create architectural forms, nevertheless still taking into account, for their designs, the specific features of the local environment, such as the clarity of the spaces or the flexibility and rationality of movement, with the final

aim, though, of using modern construction techniques to make their building influential elements of the urban space.

In the mid-1960s, in the Iraqi architectural scene a new trend emerged, characterised by an overmuch use of elements taken from the Arab-Islamic architectural heritage in many of the buildings that were erected during that period (Chadirji, 1986). Such trend was characterised by the lack of a clear overall vision of global architecture as well as a lack of clarity in regard to its origins and aims, along with the concurrent spread of postmodern architecture that started in the very same decade. That led to a strong impact of this style and its values on the practices of the Iraqi architects, but more specifically led to the tendency of the postmodern style to use historical architectural symbols in contemporary architectural compositions (Pieri, 2005). The designs and the studies of an Iraqi architect, in particular, Mohamed Makiya, who was born in 1917, in this period helped to strengthen the impact of the Iraqi architectural style as his work showed a great interest as well as a nostalgia for the traditional Iraqi architectural symbols (Makiya,1982).

Figure 3-12: Federation of Industries - 1966

However, the results were unexpected due to the growth and spread of this trend in the architectural practices. In fact, the supporters of this trend pursued an excessive use of

signs and symbols, which were copied from traditional buildings and used in the facades of the new buildings (Shirzad, 1987). Because of this approach, the designs that were executed happened to lack aspects as, for instance, a rational distribution of the spaces, nor did they manage to meet the requirements of the people for whom these buildings were destined, in so doing, missing one of the main goals of Modernism. Excessive emphasis was put on the design and treatment of the facades, with the particular aim of recalling the traditional architecture. For this reason, these architects adopted solutions recalling those of the traditional buildings of the local heritage, which, though, were mostly low buildings of one or two storeys. Multi-storey buildings were hence covered by facades aimed at altering the perception of their real dimensions in order to render them similar to the small-scale buildings of the past despite their large scale. This, along with increasing the costs, resulted in an undue loftiness that not seldom even conflicted with the functions for which the buildings had been commissioned. (Makiya, 1982). This new architectural trend might have been positive and useful, had its architects aimed at finding rational and logical solutions for their designs, which unfortunately was not the case.

The search for an architectural style that might belong to the Iraqi local environment and befit the surrounding architectural heritage was the main aim of the architects of this period. However, most architectural practices prevailing in Iraq were negatively affected by the overmuch use of forms imitating the symbols of the architectural heritage, regardless of the nature and the quality of the buildings. For this reason, most of the young designers, despite having been influenced by this trend in their designs, were able, after a short time, to understand and realise the impossibility of achieving their aims and obtaining satisfying results, had they kept on following that way. It seemed clear that the practise of selecting elements from the vocabulary of the architectural heritage in order to use them slavishly in modern buildings, specifically for their elevations, had revealed itself dull, as well as expensive (Youssefm,1982). Therefore, Mohamed Makiya's late production considers as a reaction of how architecture had lost any content or message, which led the style to be ignored and then be forgotten in the Iraqi architectural practice.

After this experience, the Iraqi architects aimed at pursuing clarity in the design theme: they became convinced that architecture might belong to the local environment by means of a deep perception and thorough understanding of the values and principles of the historical architectural compositions rather than through a slavish imitation. In other

words, they began to aim at a modern process of interpretation of elements from the past that might be suitable for a new era, at the same time taking into account, rather than opposing, the significant success of global architecture (Al-Sultany, 1985). The table below summarises the periods of Iraqi architecture and their features.

Table 3-1: The Main Periods of Iraqi Architecture

Period	Architectural Style	Elements Style	Relations Style	Material
Colonial period	New-classical	Hybrid (Local + modern)	Modern	Traditional Local materials (bricks)
1930s	New-classical	Hybrid (Local + modern)	Hybrid	Traditional Local materials (bricks)
1950s	Modernist	Modern	Modern	New materials (concrete)
1970s	Modernist + local	Generated from local and modern	Modern Abstract	Traditional local and new materials (bricks + concrete)

3.3.2 The trends of modern architecture in Iraq

Global trends and Western architectural theories were common in the countries of the Middle East during the 1950s. However, after that decade, they quit exerting any influence as a consequence of the revolutions that occurred in the area and the problems pertaining to the issue of privacy, in addition to the new general tendency towards national, political and economic independence (AL-Mullah,1988). As a result, there was a rejection of the style of modern architecture as it did not meet the aspirations of the local people willing to achieve a better future.

The concern of the architects regarding new considerations that the new era and society posed, was neither to imitate or convey the values from a particular country, nor to recopy the most illustrious architectural compositions to the new sites which have a different climate, nature, and demographic aspects, in addition to a different history and characteristics (Al-Zubaidi, 2012). They focused on linking it to local Architectural heritage in order to derive the positive elements and recreate it in a contemporary form to keep up with the present and lead their way into the future. Therefore, in Iraq, new ideas emerged supporting the global styles, particularly the newest in the environmental field, which had a limited understanding of the traditional local environment.

On the basis of what said above, the architectural intellectual trends that emerged in Iraq can be classified as a reaction to external influences.

3.3.2.1 The First Trend

This trend supported global architecture, which was common at that time, and was begun by architects who had returned to Iraq after completing their studies in the United States and Europe at the end of the 1950s. It is a trend that was encouraged by the international architects who, at the time, were working in Iraq and had already designed important buildings (Shirzad,1987). This architectural style was influenced not only by the global style but also by modern technology.

The main characteristics of this style can be summarised in the following points:

- Emphasis put on the approach of modern international architecture and its practices, as a base for creating architectural compositions, taking into account the features of the natural environment

- Application of a new method based on function, so that the space is designed in order to render movement clear, easy and logical combined with a use of new modern structural forms that might arouse surprise and amazement.
- Focuses on the principles according to which the local urban environment had formed, particularly in regard to the climatic treatments, by using artificial construction elements to reflect the international technology.
- Architectural compositions reflecting the modernity of designed form which resulted from the ability of the architect in distributing the masses and spaces according to a building function and to the issue of privacy.
- Designing process based on in-depth analysis and study resulting in a composition of the buildings marked with a significant robustness of the masses.
- Professionalism and accuracy in the design and construction details.
- Respect and consideration for the neighbouring buildings during the process of designing the single building, in order to create harmony and coexist with the surrounding environment, in spite of contrast and difference in details and the variety of architectural scales and contents (Al-Sultany, 1985).

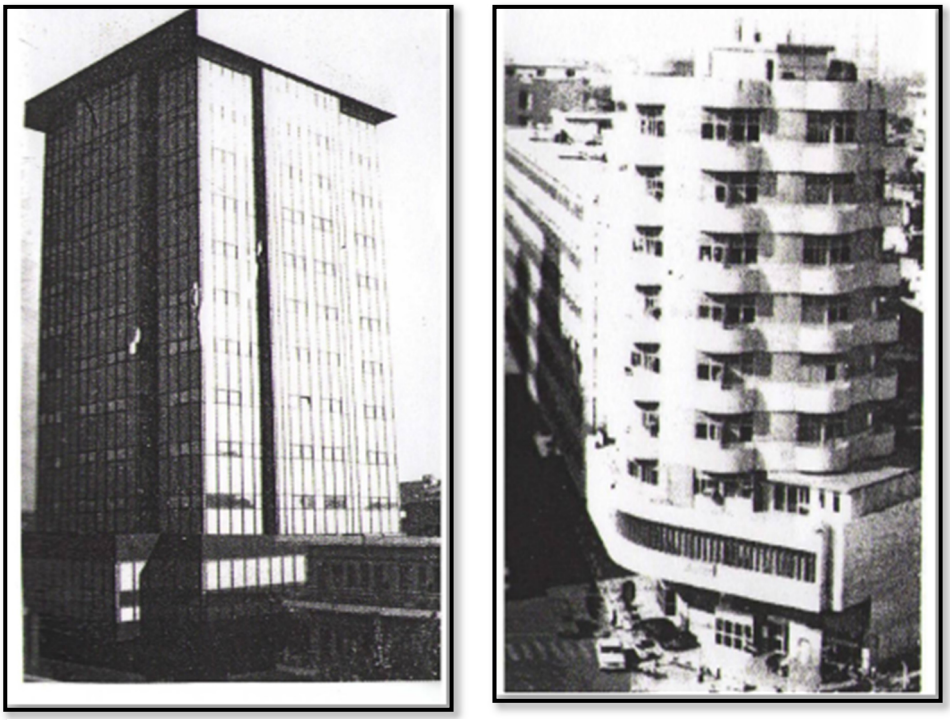


Figure 3-13: Office Buildings in Baghdad

This trend adopted the western and global architectural model as it considered it as the outcome of the world's architectural progress, which, thus, had to be followed. This

approach was adopted by a large number of architects in various Arab countries. This trend ignored the local social needs, since it dealt with the architectural practice as a technical work valid anywhere, without any considerations for the distinctiveness of the place.

3.3.2.2 The Second Trend

In the beginning, the propositions of this trend constituted serious attempts to interpret the positive elements of the Arab architectural heritage, so as to use them in modern style buildings, albeit inadequate in regard to material-related issues (Al-Sultany,1982) and consequent choice of the traditional materials which confined them to the status of traditional craftsmanship style works recalling the architectural heritage signs.

The main characteristics of this approach include:

- A design process carried out according to a methodological approach that relies on the designer's conviction for the composition, be passed through a clear vision resulted from a deep study.Thus, it's neither improvised work nor follows a rapid way for the design process, seeking to create a spirit to a modern architecture through emphasising belonging to the local environment and the richness of its vocabulary.
- A design taking into account the trends of modern architecture by using asymmetrical plan for the building components, separating them according to their function, then linking them to each other through simple movement paths, so as to confer more harmony to the masses in the composition, as, for instance, in the buildings of the Mustansiriya University shown in the Figure 3-14 (Khodaer & Nassir, 2010).

Figure 3-14 AL-Mustansiriya University

- A treatment of facades and spaces characterised by a deep attention pursued by the architect in interpreting the vocabularies of the local traditional architecture, reusing them in modern forms. The designer sometimes used lighting and building materials to create a glare also thanks to a channelling of the light through smart architectural processes, in order to make the building look like a sculpture. Chadirji (1995) is of the opinion that this approach was mostly developed in Lebanon in the late of 1950s, this style is based on the aim of creating a contemporary structure mixed with elements selected from heritage, and subsequently developed by Mohamed Makiya in Iraq. This approach offers a structure framed by a contemporary form, then mixes the selected vocabularies which include excerpts from the heritage. This trend relied on forms that had already been generated, applied, and re-touched through continuous practice over several eras.

Figure 3-15: Office Buildings

3.3.2.3 The Third Trend

This style attracted many architects in Iraqi as it offered an architectural style different from modern handling. It was seen as a new and unfamiliar style in comparison with the local architecture, which emboldened other architects to adopt it. This style focused on the monuments of the local heritage, recreating the traditional forms through a process of abstraction. The outcome was a modern architecture adapted to the local environment and strongly related to the local heritage, particularly in the external form. However, in order

to fill the gap, there was a need of further, and more rational, connection between form and function (Al-Zubaidi, 2012), which was an essential aspect cited by many critics in regard to this style, particularly for the buildings that were carried out in the 1960s. Another distinctive feature of this style was the use of local materials with concrete. Accordingly to what written above, the features of the style are:

- Adoption and interpretation of the new trends of the global architecture by experimenting them within the particular context of the place and the local nature.
- A tendency, preminentely in the architectural production of the 1960s, to focus almost only on the architectural form to be a main aim of the designer. The external form of the building did not reflect either its content or its function but was rather intended as an attractive external form, in so, showing a clear disconnection between form and content.
- Emphasis the design of the facades aimed at creating a perceptual shock through the adoption of a clear contrast between the architectural treatments, on one hand, and the clarity and simplicity of the plans, on the other hand.
- Use of the construction structure to confirm the disconnection between the plan and the facade, and the external form of building used as a formation unit.
- A Western way of dealing with the main facade due to the idea of the uniqueness of the architectural production within the overall context, in addition to focusing on qualification and independence of the building even if it had a negative impact on the neighbouring one.

Chadirji (1991) stated that this trend started in Iraq by artist Jawad Salim in 1942, who was interested with the ancient civilisations of Mesopotamia during his work in the Iraqi Museum. Chadraji may be the first who started this trend, that mix contemporary art with heritage monuments, which was the more applicable trend in development of Iraqi architectural identity.

The result of the use of this approach is an overmuch using of heritage elements which represented in a number of projects executed by local architects, most of them graduated from the architectural Iraqi school, who sympathised with heritage and modernity values to varying degrees (Khodaer & Nassir, 2010).

Figure 3-16: Municipality building of Baghdad

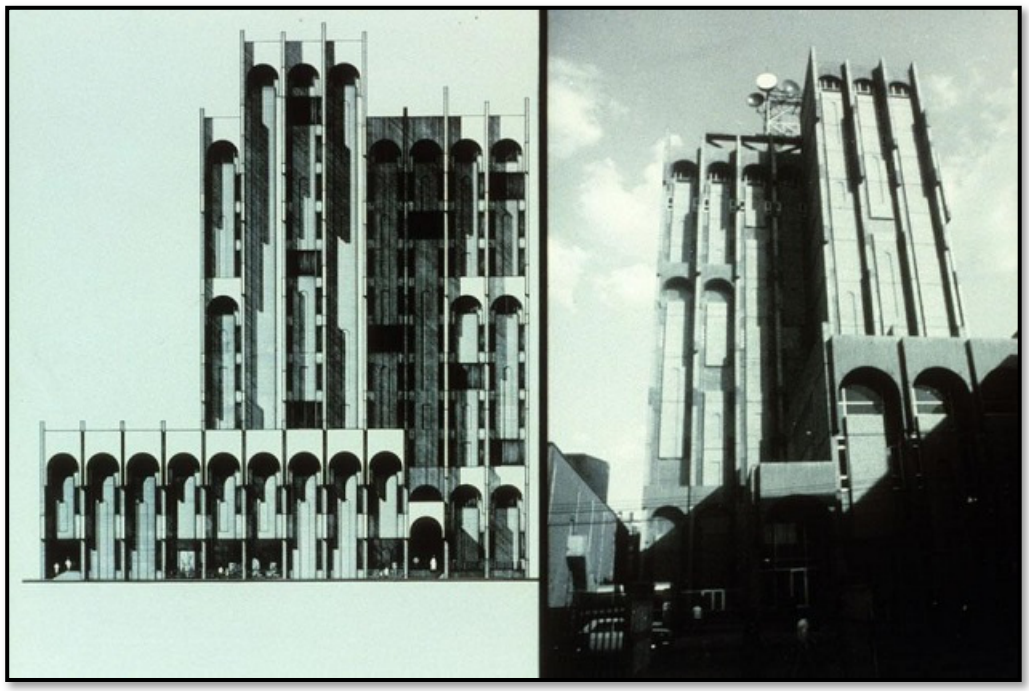


Figure 3-17: Central Post building in Baghdad, Chadirji

It should be noted there was an another common style, at the same period, called "improvised architecture" trend, which was non-scientific nor academic, depending on projects of contractors and engineers who were not architects, thus, just imitating other projects according to their common-sense or their limited background (Al-Sultany, 1982).

Therefore, many of the proposals emerged and carried out via certain ways to keep up or to follow the western-style, without an understanding of the local environment and climate.

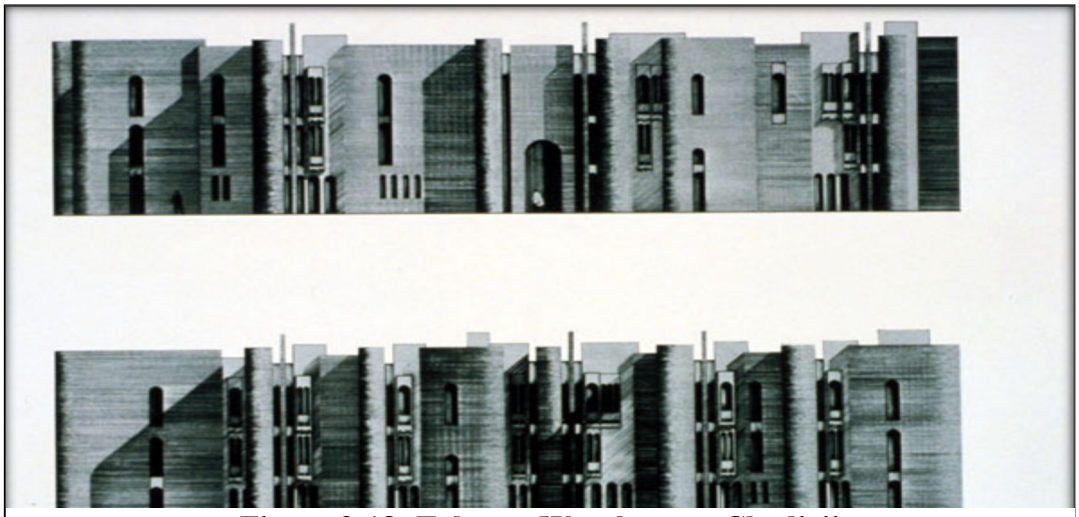


Figure 3-18: Tobacco Warehouses, Chadirji

3.4 Architectural Identity in Iraq

3.4.1 Iraqi Traditional Neighbourhood

Evidence shows that the typical form of the traditional Iraqi neighbourhood is related to the urban fabric of the Sumerian city of Ur, in the south of Iraq, dating from 4000 years ago, (Figure. 3-20). This form was common in all the Middle East countries until the early 20th century when the modernisation movement began to change it according to the western parameters and theories of that time. Islam is particularly concerned with the problems pertaining to the design of the neighbourhood, as it considers it the backbone of the community (Mortada, 2003). The layout of the neighbourhood was an interpretation of the social relationships and their cultural evolution: its fabric has formed according to the organic style and shows a clear respect for the principle of arranging the spaces on the basis of a hierarchy proceeding from the public to the private: the environments that were produced according to this style were respectful of the human needs and useful for the creation of social relationships (Mahgoub, 1997).

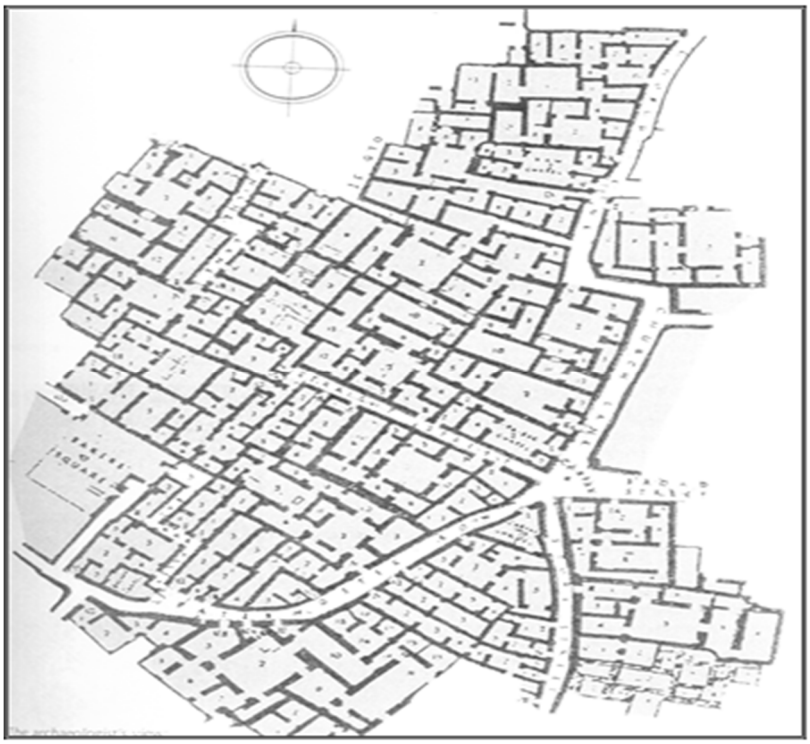


Figure 3-19: Plan of Residential Area in Ur, (Hakim, 1986, p95)

The main features of the traditional Iraqi neighbourhood can be summarised as follows:

- It is mainly constituted by rows of attached houses of one or two storeys whose upper floor, outdoor, is cantilevered and projects over the alley, providing shade. For the same reason, indoor, it projects over the courtyard, creating a cool environment, particularly useful against the harsh, hot weather in the summer.
- All the houses of the neighbourhood feature an interior courtyard, mostly due to the high concern for privacy which is distinctive of the Arab society: the courtyard is generally shaped as an L, so as to create a separation between the outdoor and indoor life and achieve a high level of privacy for the houses.
- The density of the population is very high in comparison with that of the modern neighbourhood, due to the compactness of the houses, as each of them is built on a small plot of land, usually less than 100 sq., compared to the average 400 sq. of the land plot on which the houses are built in the modern neighbourhoods.
- The number and size of the windows in the external facades of the houses at the ground floor level are extremely limited, due to the aforementioned utmost concern for privacy, while the upper floor level has large wooden windows. By contrast, the internal facades, arranged around the courtyard, have large windows, also made of wood, on both floors.

- Each house has ventilation elements such as a wind-catcher, called *Badgeer*, which creates a natural ventilation system. In addition to it, each house has also a basement, used for sleeping during the summer days, while the roof serves for the same purposes during the summer nights, as shown in Figure 3-21.
- The neighbourhood allows an easy and safe accessibility to public services as the market, the mosque, the bath etc. which are all located in the same area.
- There are strong relationships between the residents of the neighbourhood, who not seldom are bound by blood ties.

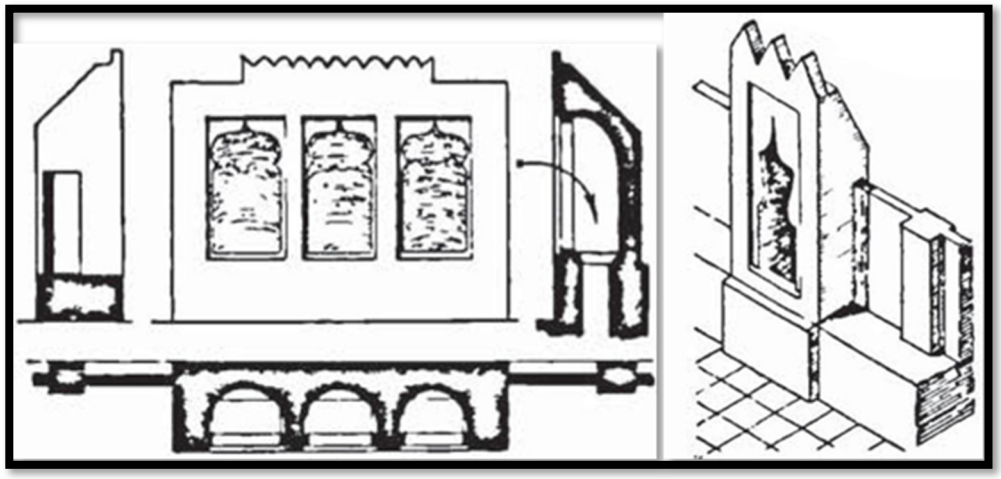


Figure 3-20: The Badgeer , a Wind-Catcher, (Al- Azzawi, 1984)

The strangers who may happen to pass through the public zone of the traditional neighbourhood represent a source of suspicion to be monitored by the local people and children who usually gather around them asking many investigative questions such as: "Where are you going?" or "Which house are you looking for?" and so on (Rapoport, 2008; Abdelmonem, 2011).

The experimentation with the planning of the neighbourhood in Iraq started in 1956 when the firm "Doxiadis Associates" planned and built the neighbourhood of Baghdad western housing (Al-Rahmani, 1986). The principle according to which the neighbourhood was built offers useful guidelines for the planning of residential areas: the location of several facilities such as schools, shops and playgrounds can be guided by it. Baghdad western housing was designed to be inhabited by 250 p/ha, mostly low-income employees. The project is centred on a grid of 600 x1000 M^2 surrounded by an arterial street in order to isolate the neighbourhood from the traffic. The streets in this neighbourhood were designed as cul-de-sacs to prevent access to cars, at the same time, though, allowing

access to service vehicles in emergency cases, and, since it was aimed to low-income employees, it was not equipped with any parking area (Al-Rahmani, 1986).

Figure 3-21: Al-Kadhimiya: an example of Iraqi Traditional Neighbourhood.

The neighbourhood included four primary schools, the capacity of each one being of around 300 children, and the location of the schools was chosen to be between 250 -350 M according to the children's ability to walk. According to Al-Rahmani (1986) the design style of this neighbourhood must be regarded as a successful approach to residential planning in the Iraqi-built environment. The components of a traditional neighbourhood in Iraq have usually been: the house (particularly the courtyard house), the mosque, the market, the hammam, the street and alleys, and the public space.

3.4.1.1 The Mosque

The mosque is pre-eminently a place of worship allowing the Muslims, on one hand, to connect with the divinity and, on the other hand, to interact with each other. Therefore, the mosque has two main functions: a religious one, as it represents a place for religious duties, and a social one, as it represents a place where the community can gather and unite (Mortada, 2003). Accordingly, for Shawesh (2000), the mosque embodies the two most

significant features of the Muslim identity: unity and faith. The mosque stands as the main landmark in the Islamic city: the minaret, in particular, is intended as the focal point of the urban landscape. The dominance of the minaret and the dome of the mosque over the heart of the city and its skyline has given the mosque a key role in the formation of the city's identity.

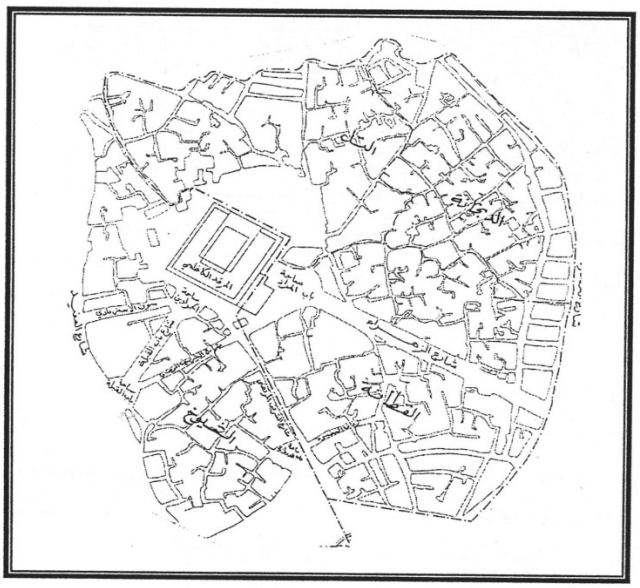


Figure 3-22: The location of the Mosque within a Traditional Iraqi City, (Kettana , 1979 , 32).

The structure of the earliest cities in the Islamic world, such as Basra and Kufa, was hinged on the mosque, which is thus the building type that has clearly most influenced the urban morphology of the Islamic city. The mosque was the first building to be erected at the foundation of a city: located in the centre of the urban fabric, all the neighbourhoods within the walls of the city were oriented towards it (Al-Hokail, 1995). In the largest cities, further norms regulated the location of the mosques according to the population density of the area, so that, for instance, it was forbidden to build two mosques too close to each other. According to the principles of Islam, the location of a mosque is mostly determined by the fact that it must be reachable on foot by the people living in the surrounding area, to encourage them to attend it, so that they can pray regularly in a public space rather than in their own private homes. The importance of the mosque in the Islamic city has been mentioned by Antoniou (1981) who argued that: "*Islam became a religion for towns-people. The mosque required a fixed location and a permanent population. No community could exist without it. The social solidarity based on religion*

became a powerful force centred around life in cities, leading to the rise and development of urbanisation in Islam".

In traditional cities, other activities, of social rather than religious nature, used to take place within the mosque, such as schooling, which indicates that, at that time, the mosque also played an intellectual and educational role along with its main religious one.

It is not a case, thus, that in the modern design of the neighbourhoods, the importance of the mosque decreased as it has lost many of the aforementioned collateral social functions and activities. Nevertheless, it still constitutes a gathering place for the neighbourhood (Al-Hokail, 1995).

3.4.1.2 The Market

From a historical point of view, the market is an urban feature pre-existent to the Islamic society. The influence of the Roman and Byzantine civilisations on the development of the market in the Islamic world is clear, as can be seen in Damascus and Aleppo (Fethi, 1977). The philosophical view of Islam in regard to equality can clearly be seen in the choice of the market area location, and in this regard Chalmeta has concluded, in his study of the markets of the Islamic city, that their location is determined on the basis of the idea that the market had to be reached equally by all the people who live in the same city, following the advice of the prophet Mohammed in regard to this issue (Mortada, 2003). In all the earliest Islamic cities, such as Baghdad, Basra and Kufa, the location of the markets was usually in the centre of the city, surrounding the mosque. However, there were some other small shops that might be located within the residential areas in order to provide the necessary requirements for the residents of the neighbourhoods. In addition to the economic role that it played for the city, allowing trading and business activities, the market also represented a place aimed at the interaction between people, helping to strengthen the social relationships between them. The issue of safety is significant in the choice of the location of the market, particularly in regard to its accessibility, which can be considered as one of the main criteria for it.

For Shawesh (2000), the importance of the market for the city is due to the fact that it provides people with the suitable environment to meet each other and encourages social interaction, in addition to its main function of economic centre where residents go to buy and sell goods. According to that, both the economic and social environment should be taken into account in the design of the market (Shaiboub, 1979). Markets, in Islamic

cities, are categorised according to the kind of goods sold in them (Hakim, 1996). There are three types of traditional market in Iraq, which are: the covered market, the open market, and the open market in the square. This classification applies to the other Islamic cities (Fethi, 1977).

As Burns (1963) stated, the attractiveness of the traditional market is particularly strong in comparison with that of the other types of commercial buildings due to its suitable design and perfect choice of its location. Nevertheless, today, in Iraq, most of the traditional markets have been neglected, and a lack of maintenance has led most of them to collapse, while others have lost its unique architectural style due to distortions, such as the replacement of the roofs with corrugated iron sheets.

Figure 3-23: Traditional Market in Iraqi Cities

3.4.1.3 The Open Space

According to Al-Rahmani, (1986), any space that is not used for buildings or structures can be defined as an open space hence this definition can include gardens, playgrounds, agricultural lands, and so on (Al-Rahmani, 1986). The open space is regarded as a one of main components of the city: the open spaces are used by people for several purposes such as relaxation and social interaction with others. In addition, the open space may be considered as a tool that can be used to improve the climate or exert control over it. Building a city must take into consideration the need to weave the public spaces together with buildings and streets as the well-being of any society is measured by means of the availability of the open space that can be used during everyday life. According to Daza (1982), the open space could heighten the sense of collective and individual identity. The

development of memory and the attachment to the place depend on the role that the open space plays. Accordingly, the possibility of maintaining or destroying the city's identity also depends on the open space, given its importance in the formation of the urban fabric. Shawesh (2000) refers that the number and the activities of the places surrounding the open space contribute to determine it.

3.4.1.4 The Hammam

The Arabs adopted the steam bath, which they called "hammam", from the ancient Romans. The bath-house was one the most important urban elements in Roman Antiquity and it subsequently became a typical component in the Arab Islamic city, as well (Ismail, 1972). According to Sibley (2006), the Arab Muslims redeveloped the hammam in order to meet the different needs related to their own traditions and religious beliefs. The archaeological findings in the earliest Islamic cities such as Basra and Fustat have produced clear evidences of the existence of hammams within their urban fabric (Al-Kaissi, 1984). The hammam served for different purposes in the Islamic city, primarily to fulfil health and social functions. In regard to sanitary and hygienic aspects, in addition to cleaning, the hamman was a recreational site that offered relaxation and massages to its users. For what concerns its social function, the hammam was a place of social interaction, where people could meet and exchange ideas and converse about their own lives and their own business. For this reason, it was regarded as a social centre in the traditional neighbourhood (Sourdel, 1966). The typical hammam was composed of two parts, one for the men and another for the women. However, sometimes the same hammam could be used by both genders although at different times, as, for instance, in the morning for the men and in the afternoon for the women.

This building type earned great importance within the Islamic society due to the fact that the philosophy of Islam puts much emphasis on the need to maintain the cleanliness of the body. This is also the reason why the hammam is usually located close to the mosque (Fethi, 1977). There were many hammams within the Islamic city and their number and distribution varied according to the number and location of the neighbourhoods: there was one hammam in the heart of each neighbourhood, and, in addition, there was a main hammam in each city, which was located in its centre, within the market (Ismail, 1972). Al-Kaissi (1984) has described the internal design of the traditional hammam of the Iraqi cities as follows:

"*A hammam is entered from the suq by an inconsequential doorway interrupting the row of shops in the suq. Once inside, however, the hall widened and gave access to a spacious domed disrobing room lit by a lantern in the dome directly over the pool in the centre of the room. At either end, the room was lengthened by deep wide Iwans with low ceilings*".

There was a cold room connected with the pool room, whose function was to provide an intermediate zone between the outside and the inside. This COLD room was linked with another room, whose temperature was warm. While the hot room was located on the same axis of both previous rooms, this room has used to stimulate the bather for sweating before starting the activities of cleaning and massage which were acting inside the warm room (Ismail, 1972).

The hammams were very common within the Iraqi cities in particular. According to Al-Sabi (1964), there were about 1500 hammams in the city of Baghdad during the Abbasid period, although at the end of the seventh decade of the last century their number had decreased to 60 (Al-Ashab, 1974). In the city of Mosul, there were about 210 hammam in the mid-thirteenth century (Jirjees, 1975). While one of the main features of the Iraqi hammams of the Ottoman period was the richness of their decorations, by contrast the later hammams, in Iraq, were characterised by a marked simplicity and were mostly focused on their function: the external facade of the hammam was a plain wall, and the design of its interiors was devoid of luxury and ornament as well.

The famous Arabic traveller Ibn Battuta described the hammams in Baghdad as follows:

"The bath-houses m Baghdad are numerous, they are among the most sumptuous of baths, and the majority of them are painted and plastered with pitch, so that it appears to the spectator to be black marble.... In each of these bath-houses there are a large number of cubicles, each one of them floored with pitch and having the lower half of its wall coated with it, and the upper half coated with a gleaming white gypsum plaster, the two opposites are thus brought together in contrasting beauty. Inside each cubicle is a marble basin fitted with two pipes, one flowing with hot water and the other with cold water. A person goes into one of these cubicles by himself, nobody else sharing it with him unless he so desires. In the corner of each cubicle is another basin for washing in, and this also has two pipes with hot and cold (water). Everyone on entering is given three towels, one of them he ties round his waist on going into (the cubicle), the second he ties round his waist on coming out, and the third he dries the water from his body. I have never seen such elaboration as all this in any city other than Baghdad, although some (other) places

approach it in this respect" (Fethi, 1977). Most of the traditional hammams in Iraq have been demolished or reconverted to another function. Their strategic location within the city and their large dimensions led to a competition with other building types and activities over the land use.

3.4.2 Traditional Urban Fabric

The urban fabric is a response to the needs and demands of a society. The shape of the urban fabric is affected by the variety of needs and demands of a given time and place in which that given society exists so that it reflects the prevailing culture and the natural environment. Thus, the form of the urban fabric also constitutes clear evidence of the historical development of the area (Al-Kaissi, 1984). The formation process of the urban fabric in the ancient cities depended on three factors: human needs, environmental demands and human capability. Subsequently, many factors have played a role in developing this process, firstly, technology, which was absent in the formation process of the ancient cities; by contrast, technology is currently the main factor that helps humans to increase their ability to shape and form the urban fabric in order to meet their demands.
The urban fabric of the city consists of the architectural masses that contain the multiple activities of specific human groups within a specific place, which represents a multiple land use (Gibson, 1977). The traditional urban fabric represents the main component of the heritage urban environment, which include the historical buildings and the urban spaces. The outcomes of the relation between buildings and space have formed the characteristics and features of this fabric. Within the traditional cities, the urban fabric was formed to encourage the interaction between the residents in order to achieve strong social relationships. The way to achieve it was the creation of attached houses within a closed cluster (Mortada, 2003). The main features of the traditional urban fabric of the Iraqi city can be summarised as below;

3.4.2.1 The Winding and Twisted Alleys

The common feature of the residential areas of all the cities of the Islamic world is the organic and irregular plan. The streets and alleys are usually narrow and twisting, mostly shaded, and many of them are cul-de-sacs (Al-Kaissi, 1984). The facades are characterised by a marked simplicity in terms of architectural treatments, as they are mainly considered

as environmental treatments to provide the house with a private space (Wheatly, 1976). Despite their narrowness, the traditional alleys provide a comfortable environment for the interaction between people as they allow pedestrian circulation and all that it entails (Mahgoub, 2007). In the same light, Mumford (1961) refers that, however, not all the alleys had the same width, and the wider were of about 10 feet in order to be used by the transients as convenient routes. Generally, the width of the streets was appropriate for their purposes and functions: a further wideness would have been regarded as land wastage.

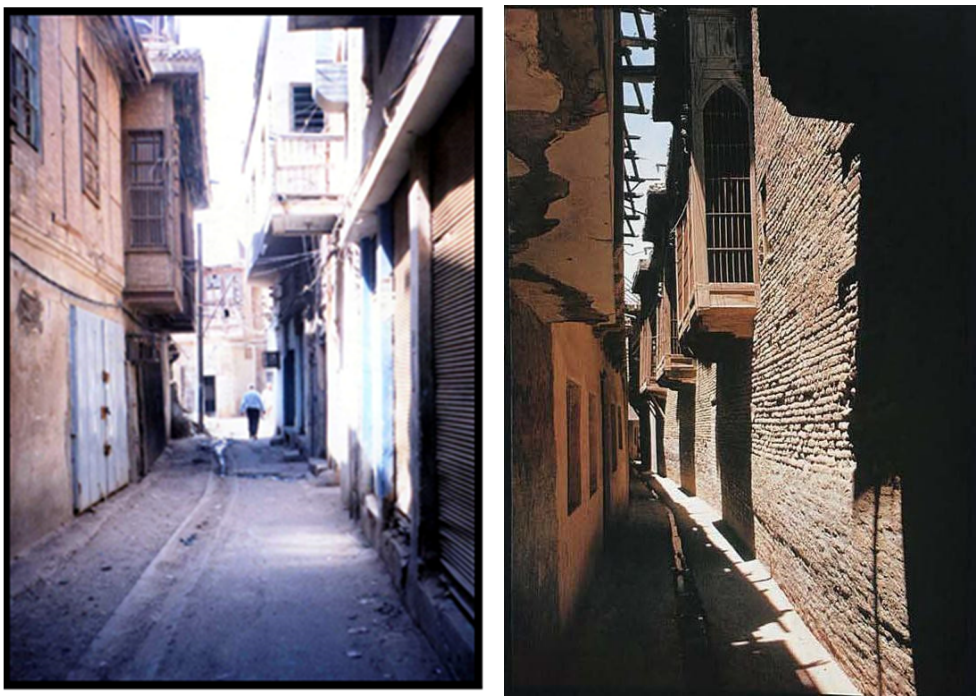


Figure 3-24: The Alleys of Traditional Cities in Iraq

The layout of the traditional city does not allow the creation of a continuous scene unfolding over the long distance as the visual escape is interrupted by the constant change in direction of the paths, which, moreover, leads to a change of light and shadow due to the different sun angle, conferring to the urban scene a sense of continuous renewal. Passing from a winding alley to another creates in the recipient a sense of surprise mixed with a perception of constant harmony (Al-Mudhaffar, 2005).

3.4.2.2 The Cohesion:

The integration and cohesion of the traditional urban fabric were a reflection of the cohesion of social patterns, tribal and family ties, and environmental aspects, which made the city distinctive thanks to the strong nature of the existing relationships within the

Muslim community. The unity and cohesion of this system provide the residents with a sense of mutual protection (Amin, 1998). The strength of the social fabric that binds the neighbours, can clearly be inferred from the way in which the houses gather. (Hakim, 1986).

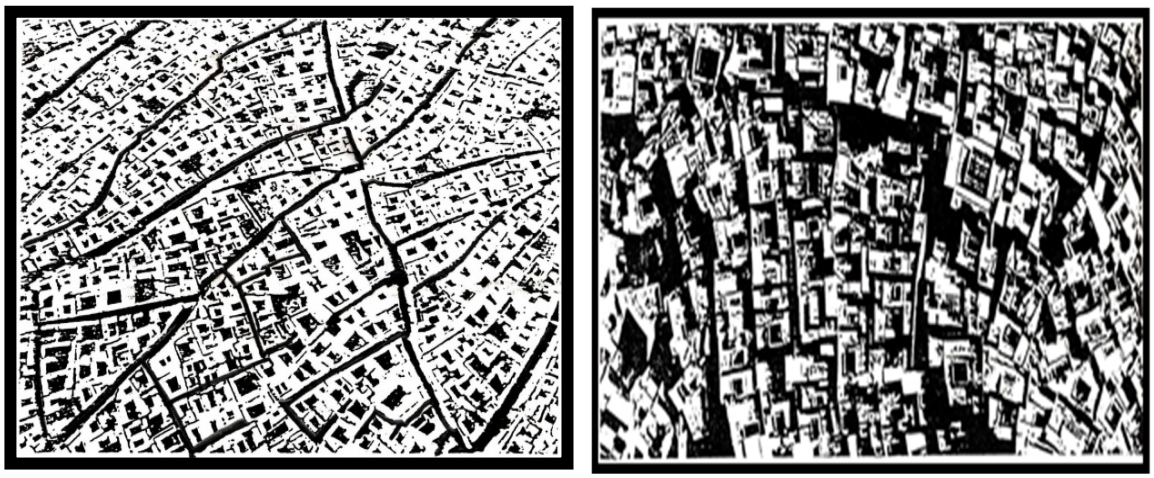


Figure 3-25: The Cohesion of Traditional Urban Fabric in Iraqi City

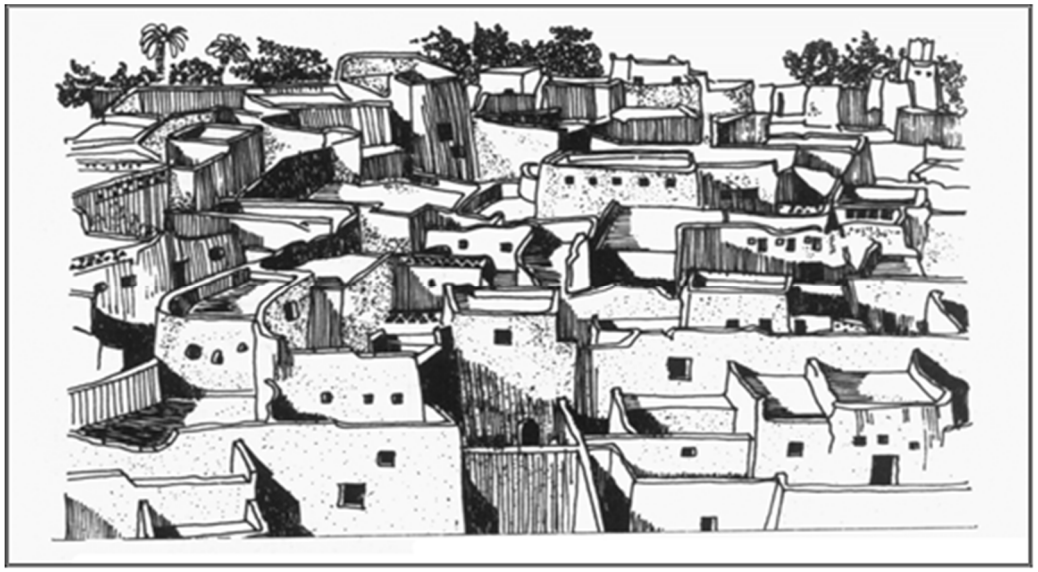


Figure 3-26: The Attached Houses in Arabic Islamic City, (Shirzad,1985,147)

3.4.2.3 The Hierarchy:

One of the distinctive features of the traditional city is the hierarchy of all the components of the urban fabric, as it can clearly be seen at all urban levels. The sudden change of directional axes, colours and shapes allow the urban fabric to avert a sense of excessive

uniformity that would produce a general perception of monotony and dullness in the recipient. The hierarchy continues within the houses where the spaces are arranged around the inner courtyard according to it, Figure 3-27.

Figure 3-27: The hierarchy of Urban fabric in Traditional City

3.4.2.4 The High Density:

The housing and optical density is the hallmark of the traditional urban fabric of the Arab Islamic city, while the population density is subject to fluctuation in the historic centres of the cities (Wheatly, 1976). This urban fabric consists of the relationship between the buildings and the relationship between these buildings and the surrounding urban spaces and the circulation system. The central area of the traditional Arab Islamic Cities has a compact fabric with the mosque as its central point. All the activities are oriented towards the central area through a hierarchy of different levels of movement.

The current urban fabric of most of the Iraqi cities is characterised by a sharp contrast between the historic and the contemporary areas. Consequently, there is no clear vision among architects and urban designers in regard to the way to follow in order to meet the needs and demands of the Iraqi population.

3.4.3 The Courtyard House

The building type of the courtyard house pre-dates the Islamic era as it was conceived to meet environmental requirements. However, it was redeveloped in order to provide the Islamic requirements regarding the issue of privacy in addition to environmental solutions

(Al-Hokail 1995). The courtyard houses were common in most of the cities of the Middle East, not only Iraq, from Egypt to Iran to Turkey. In the early twentieth century, in the countries occupied by the British, they became less common since a new pattern was developed for the new houses, which was later called later "colonial house style". This style was used not only for the houses but also for other building types such as castles and palaces as it was appropriate for the hot, harsh local climate (Al-Zubaidi, 2007).

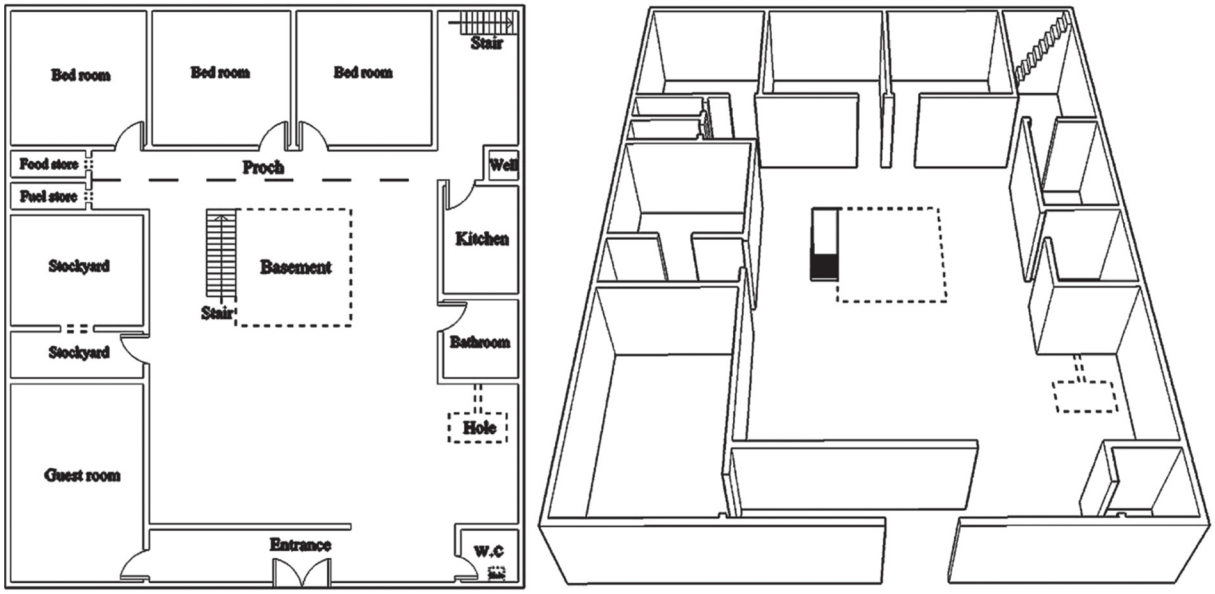


Figure 3-28: Traditional Iraqi House

The main features of the courtyard house are summarised below:

- Presence of the courtyard, which was the main feature as it served for two purposes: from a social point of view, as a private place for family activities, and, from an environmental point of view, as a comfortable space against the hot weather during the summer. Figure 3-29.
- Presence of the basement, which was used for sleeping during the summer, particularity during the day, while, during the winter, was used as a store. (However, in not all the regions of Iraq the houses feature a basement: the houses in Basra, for instance, do not have any basement due to the high level of underground water present in the area.), Figure 3-30.
- Height set to two floors at most, and not seldom to only one floor.

- Indirect entrance, as the main door of the house was not aligned with the entrance leading to the interior courtyard, in order to achieve privacy by preventing the direct view from the street into the private zone within the house (Figure 3-28).
- Absence of windows on the ground floor level of the facade or, in some other cases, presence of few windows of small size.
- Presence of windows on the first-floor level of the facade screened by a wooden structure called "Shanasheel", a type of oriel window common in the Arab world with the name of "Mashrabya".
- Use of bricks as the main material to build the walls of the houses, particularly the thick external walls.
- Use of wood for the roofs.
- Projection of the cantilevered upper floors beyond the dimensions of the lower floor in order to provide shade for both the external alley and the interior courtyard, Figure 3-30.

Figure 3-29: The Courtyard in Iraqi Traditional House

The traditional courtyard house in Iraq has been described by Gulick (1967) as a building with a central courtyard surrounded by two floors of rooms from four sides or, in some other cases, from three sides. At the first-floor level, the courtyard has an open gallery running along the walls and giving access to the rooms. The front facade has few small windows on the ground floor level in addition to a simple door, while the first-floor level has large wooden windows facing onto the alley. On top of the roof, there is an emerging

element made of bricks, which is an air-catcher aimed at pulling fresh air into the living space on the ground floor and in the basement, particularly in the summer.

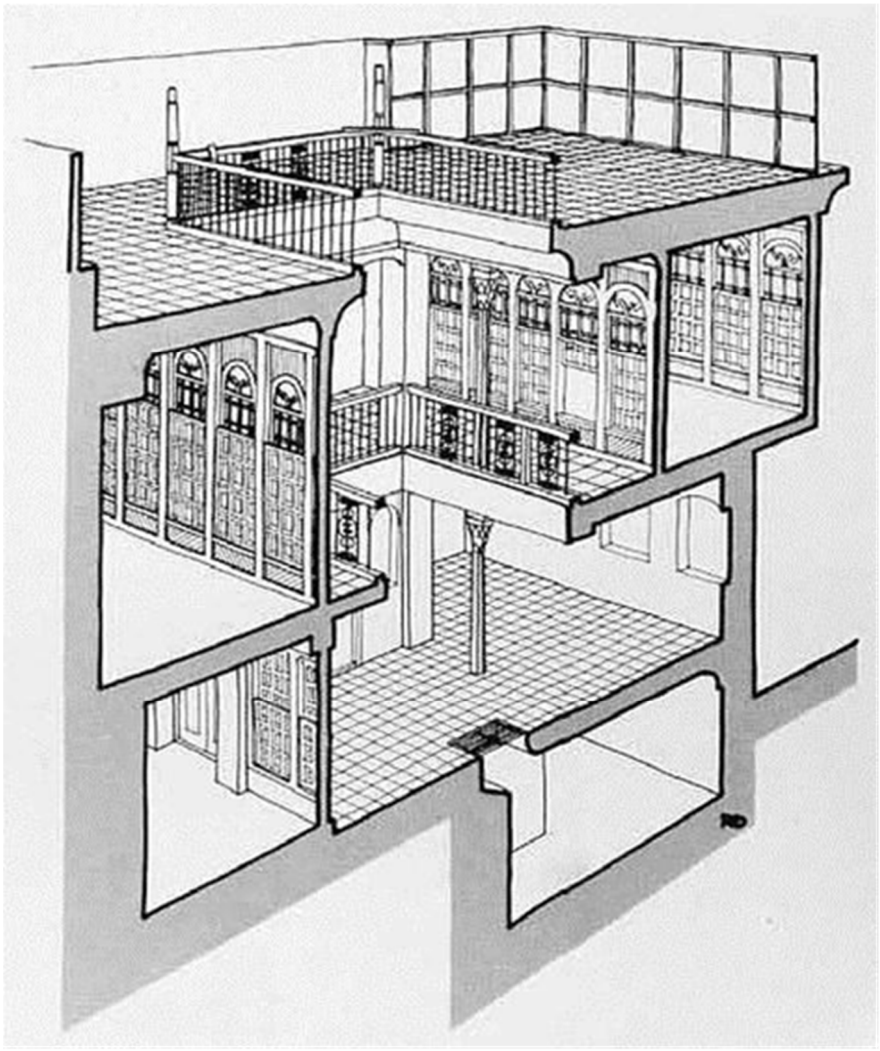


Figure 3-30: The Relation between the Courtyard and the Rooms, in addition to the Basement, (Warren& Fethi 1982)

3.4.3.1 Privacy

Islam considers the house a private place. Accordingly, the life of the people within their houses has to be protected from other people's sight. This derives from the regulations of the Quran and the Prophet Mohammed. Islam regards the issue of privacy, particularly the privacy of the house, as a bedrock. There are three levels of privacy according to Islam, which are individual, family and community privacy. As a result, the introverted orientation of the house has been considered as the best solution to achieve this aim (El-Shorbagy, 2010).

The high level of consideration for privacy in the Iraqi built environment can be seen very clearly in the urban setting of the traditional environment which presents an inward arrangement of all the structures and a hierarchy of the spaces, which are divided into public, semi-public, semi-private and private, the harmony of the height of the buildings, and the position of the windows and of the doors (Al-Hokail. 1995). According to Al-Kaissi (1983), privacy and security must be regarded as significant factors in the formation of the buildings and the neighbourhoods in the traditional residential areas in Iraq, and, furthermore, in the organisation of the network of streets and alleys. In regard to the traditional neighbourhoods and houses, there is a strongly emphasis put on the issue of privacy, particularly the visual privacy, which led to the creation of certain forms. That was related to the aim of preventing the view of the women inside the house. According to Abel (1986), a biological system can be seen very clearly in the Arab cities, and is reflected by the type of urban fabric, which he describes as complex. The network of winding alleys and the presence of courtyard houses has created an organic planning system which provides a high level of privacy. Although the traditional houses in the Iraqi cities are attached to each other, the privacy of each of them has always been achieved thanks to the presence of an internal courtyard. All the rooms within the house are oriented towards the inner-courtyard (Fig. 3-31) so as to provide the family with a private space to carry out their activities without being disturbed by the others: in addition, there was a sharp division between males and females within the house so as to achieve even more privacy. Al-Zubaidi (2007) has summarised the main features which played a key role to achieve privacy in the traditional house as: the hierarchy at both the level of the city planning or inside the house, the unity of the neighbourhood, the winding and narrow streets and alleys, the location and form of doors and windows, in addition to the features of the houses facades such as the solid and high external walls and other specific elements such louvers and screens.

To achieve domestic privacy in the Iraqi-built environment, many different treatments were adopted, such as the gender insulation and the indirect entrance. These treatments derived from a deep understanding of the social, cultural and religious values that formed the Iraqi environment which were reflected also on other elements used in the traditional courtyard house, such as the “iwan”, the “talar” and the “shithirwan”., Figure 3-32.

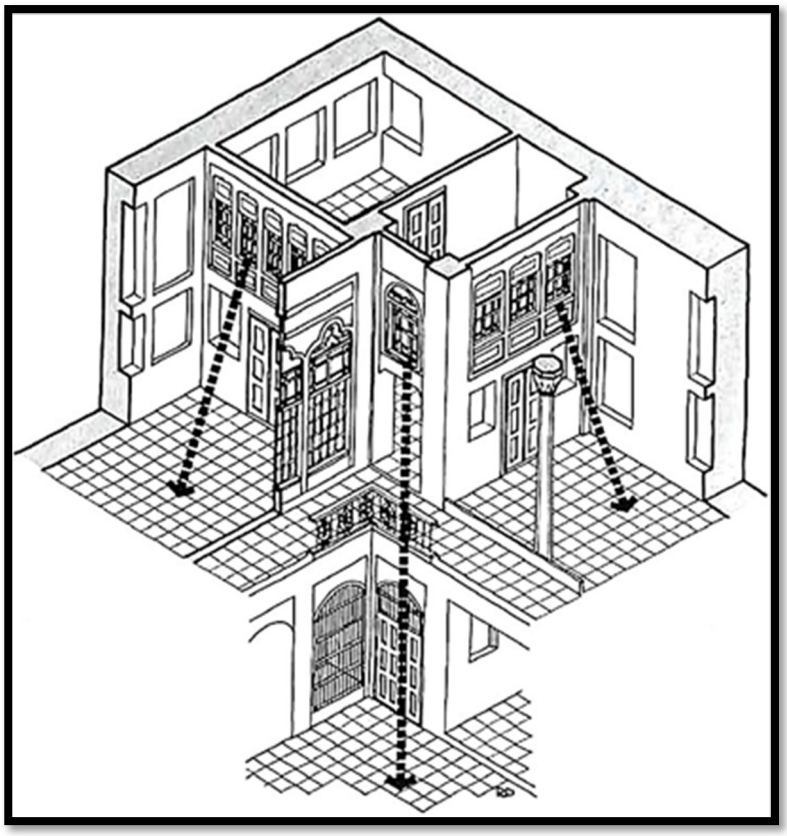


Figure 3-31: The Indoor Opening in Traditional Iraqi House, (Warren& Fethi, 1982,83)

The shanasheel is also regarded as an important element to provide privacy. It is an oriel window with a wooden screen, which allows ventilation and light to access the indoor space at the same time preventing the view from the street into the private spaces. It allowed, in particular, women to see the outer environment without being observed. A further element aimed at providing the house with solutions aimed at privacy was the "kabishkan", a separate room where women could withdraw during the visits of male guests, protected by a wooden screen called "Ursi", Figure 3-33 through which they were able to see without being seen (Fethi, 1982).

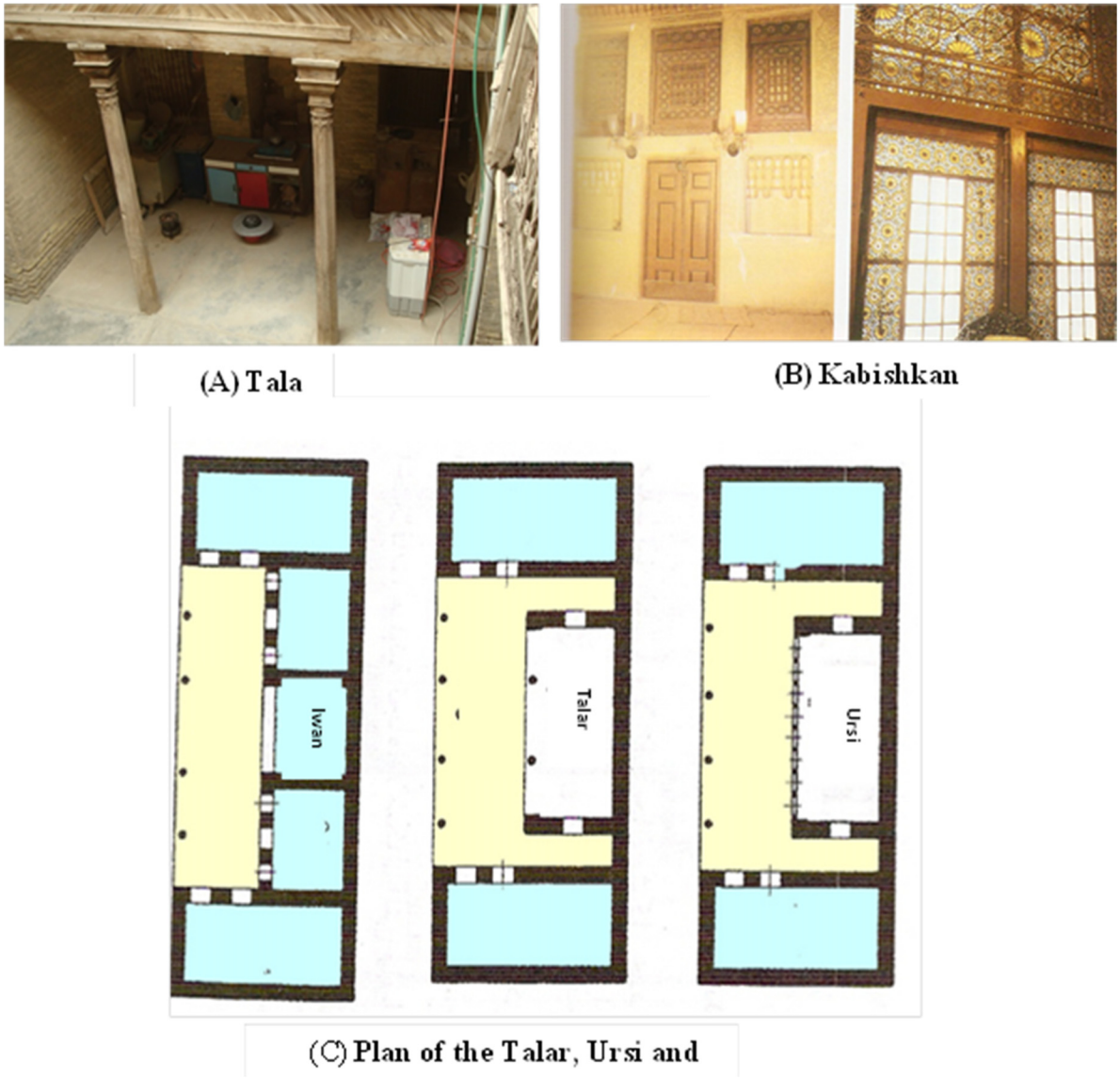


Figure 3-32: Talar, Kabishkan, Iwan and Ursi

Figure 3-33:"Ursi" Windows (Warren & Fethi 1982)

There is another element that is intended to provide privacy for the house in the Arab Islamic citiy, which is the indirect entrance. All of the traditional houses of the Iraqi cities have this kind of entrance, used to prevent the visual intrusion towards the inside by obstructing the direct view from outside. As Al-Thahab (2014) refers, it is articulated in a way that does not allow any kind of direct vision towards the core of the house, which includes the courtyard and the family room. Furthermore, the fence of the roofs of the Iraqi traditional houses was highest than the human height in order to prevent the view from outside. The roof was used by the family for many activities, especially for sleeping during the summer nights, and for this reason it was considered a private zone.

In addition to the fence, all the houses of the traditional Islamic cities have the same height, in order to prevent the neighbours from direct sight into inner of the house. By contrast, the modern architects regarded the issue of privacy as a limit for their freedom in the design process, thus did not take it into account (Al-Thahab, 2014).

3.4.3.2 Materials

According to Al-shaliby (2015), the traditional building materials are one of the symbols that express the identity of a place. Most of the materials used in the traditional Iraqi architecture were local, such as the mud brick, which was the most common material of which buildings were made. Then, in the early twentieth century, the burned brick began to be used as as an alternative to the mud brick (Warren & Fathi, 1982). Along with them, and in addition to the stone brought from the north of Iraq, another material, the gypsum plaster, started to be used, as it was extremely available in the region. A mixture of mud and straw was used for the roofs in order to render them waterproof.

Many strains of wood were used for the buildings, particularly teak, which was the best among them due to its particular resistance. Notwithstanding the negative aspects linked to the effect of the termites, which are common in Iraq, in addition to the maintenance requirements that its use entails, wood continued to be widely used. In fact, especially low-income people were encouraged to use it due to its low costs and, moreover, as wood is a light material in comparison with others, thus, the walls made of mud could support its weight in a relatively easy way.

The doors and windows were also made of wood, while their frames were usually made of iron, which was commonly used also for the handrails. In addition, some luxury features such as the hand knobs, were made of bronze and brass. The material used to cover the

grounds were the traditional tiles made of clay called "Fershi", which provided thermal isolation, particularly against the high temperatures during the summer, Figure 3-34. In this regard, it should be noted that the past homogeneity of the traditional urban built environment, also due to the use of the same materials for all the buildings, as described above, has often been replaced by heterogeneity and incoherence due the current variety of materials used in the modern buildings and neighbourhoods, especially to the mix of modern and traditional materials (Al-Sheliby, 2015).

Figure 3-34: The Traditional Clay Tiles "Fershi" used to cover the Floors and Roofs

3.5 Modernizing in Iraq

The modernisation of Iraq started at the beginning of the 20th century with a large expansion of the cities, especially the three largest and most important cities of the country: Baghdad, Mosul and Basra. In parallel with the expansion in size, transformation processes occurred which affected the form itself of these cities, each of which, therefore, resulted in having three different distinct areas built according to different architectural styles: the old core of the city, which maintained its architectural heritage built according to the traditional premodern style, the area surrounding it, dating from the time of the British rule, whose buildings were the expression of the British colonial style, and, finally, a third area, the most recent, whose buildings had been erected according to the modern style (Al-Rahmani, 1986).

The main features of the old core of the city, built according to the traditional, premodern, style, are the narrow and winding streets sided by the courtyard houses with their decorated facades, built with the same local materials and one or two storeys high, which conferred homogeneity to the skyline. Differently, the colonial style, which started with the British invasion of Iraq at the end of the First World War, is characterised by straight and relatively wide streets and roads with multi-storey buildings and houses whose facades have external columns and in which the internal courtyard has been replaced by a front garden. The modern area, instead, was clearly built according to the western style, with detached or semi-detached houses without courtyards built along wide streets with unfamiliar materials, which resulted in an inhomogeneous skyline.

All the development processes of the Iraqi cities were implemented by foreign architects, despite the presence of many qualified Iraqi architects such as Ahmad Mukhtar, who had graduated from the University of Liverpool, and had been the government architect in 1937. The masterplan of Baghdad of 1954, completed in 1956, for instance, was designed by Minoprio & Spencely and P.W. Macfarlane, a consortium of British firms. (Theodosis, 2008).

According to Al-Wardi (1995), the impact of modernity can clearly be seen in the change of the society's structure: the size of the families decreased and the social interaction between neighbours and friends dramatically diminished as the relationships between people had become limited due to the disappearance of the social spaces that served for this purpose.

The ideology of modernity does not conceive the neighbourhood as a coherent environment suitable for the relationships between residents and families and, therefore, by adopting rigid boundaries in the design of the contemporary residential areas, creates a separation that breaks the hierarchy of the subdivisions of the spaces, which in the traditional neighbourhood constituted a system wherein individuals could locate themselves and their values (Abdelmonem, 2011).

3.5.1 Doxiadis Plan,

In 1950, many foreign architects and architecture firms were invited to work in Iraq, such as the Greek architect and town planner Constantinos Doxiadis who designed a master plan for the city of Baghdad. The others were:

- The American architect Frank Lloyd Wright, who designed the master plan for Greater Baghdad and the Opera House.
- The Spanish architect Josep Lluís Sert, who designed the US embassy.
- The German architect and educator Walter Gropius and the Boston-based "The Architectural Collaborative" (TAC), who designed the building of the Baghdad University.
- The Italian architect and designer Gio Ponti, who designed the Development Board Offices.
- The Finnish architect Alvar Aalto, who designed the Baghdad Art Museum.
- The French-Swiss architect Le Corbusier, who designed the gymnasium and the stadium.

After the revolution of 1958 and the establishment of the Iraqi Republic, most of these projects were discontinued, except for the University of Baghdad and the Gymnasium (Chadirji, 1982).

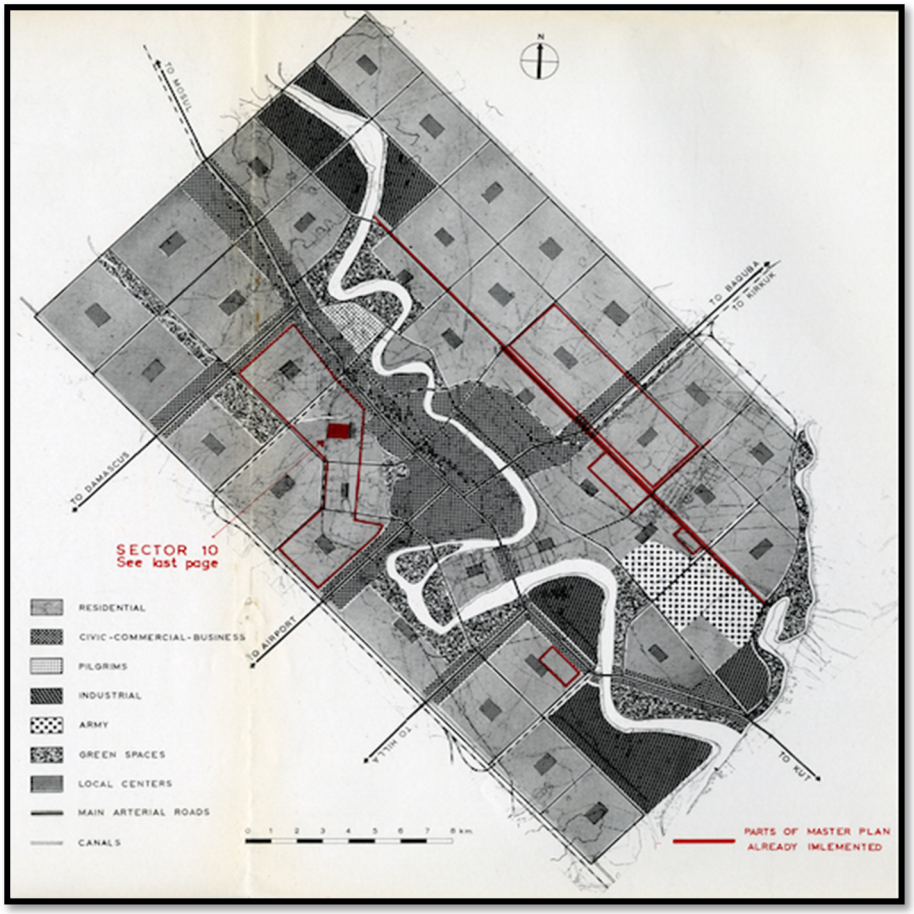


Figure 3-35: The Doxiadis Master Plan for Baghdad, 1958

Doxiadis had been recommended to the Iraq Development Board by the International Bank for Reconstruction and Development (Pyla, 1998), although his project was more expensive than those of the other architects, Figure (3-35). According to Pyla, there are two major goals in regards the Doxiadis' Plan for Baghdad, the first goal was to build the modern state through using the formal and social experiments, and the second goal was to represent the importance of the city of Baghdad regarding the modern reconstruction after the war (Theodosis, 2008).

The approach of Doxiadis has had two goals: "Firstly; to reject the ethos of the individual signature designer and to emphasize the necessity of addressing basic human needs, well beyond functionalist of technological concerns, secondly; to reinvent architects and planners as development experts by emphasizing the significance of the physical environment in promoting socioeconomic development in the post-World War II era." (Pyla, 1998). In his plan for the city of Baghdad, Doxiadis focused on the aesthetic aspects, with particular regard for order and regularity, therefore he had a specific concern for the traditional areas, which he considered undesirable, despite their value. (Pyla, 1998). The Doxiadis plan for Baghdad was based on function, even within the residential areas, which were classified according to class, with no regard for the ethnicity or confessional belonging of the residents: the economic factor remained predominant in this division. In his project, Doxiadis respected the human scale, as it is clear from the technical parameters followed to plan the residential sectors (Crinson, 2003).

In designing the new houses, Doxiadis adopted an approach aimed at adapting the European forms to the hot climate of Iraq, which was due to the Modernist assumption that modernity might solve every problem. The old commercial area of Baghdad was in the middle of the premodern core of the city, while the new commercial area was arranged along the main axes of the new city. The commercial area was the core of the plan and was surrounded by the residential areas. There were 19 residential areas, each of which included many small neighbourhoods. Each residential area was planned according to a grid system style, with narrow and shaded streets, and the height of its houses was limited to two or three storeys Figure 3-36.

Doxiadis also suggested that the ideal number of inhabitants for the city of Baghdad for the future had to be set to a maximum amount of three million people. In 1958 the population of the city amounted to one million inhabitants (Pyla, 1998). In its being an elongated rectangle hinged on the Tigris river as an axis of potentially unlimited growth, the

Doxiadis plan for Baghdad bore much resemblance to the concept of Linear City (Ciudad Lineal), developed by Arturo Soria y Mata for Madrid from 1882 onward (Crinson, 2003).

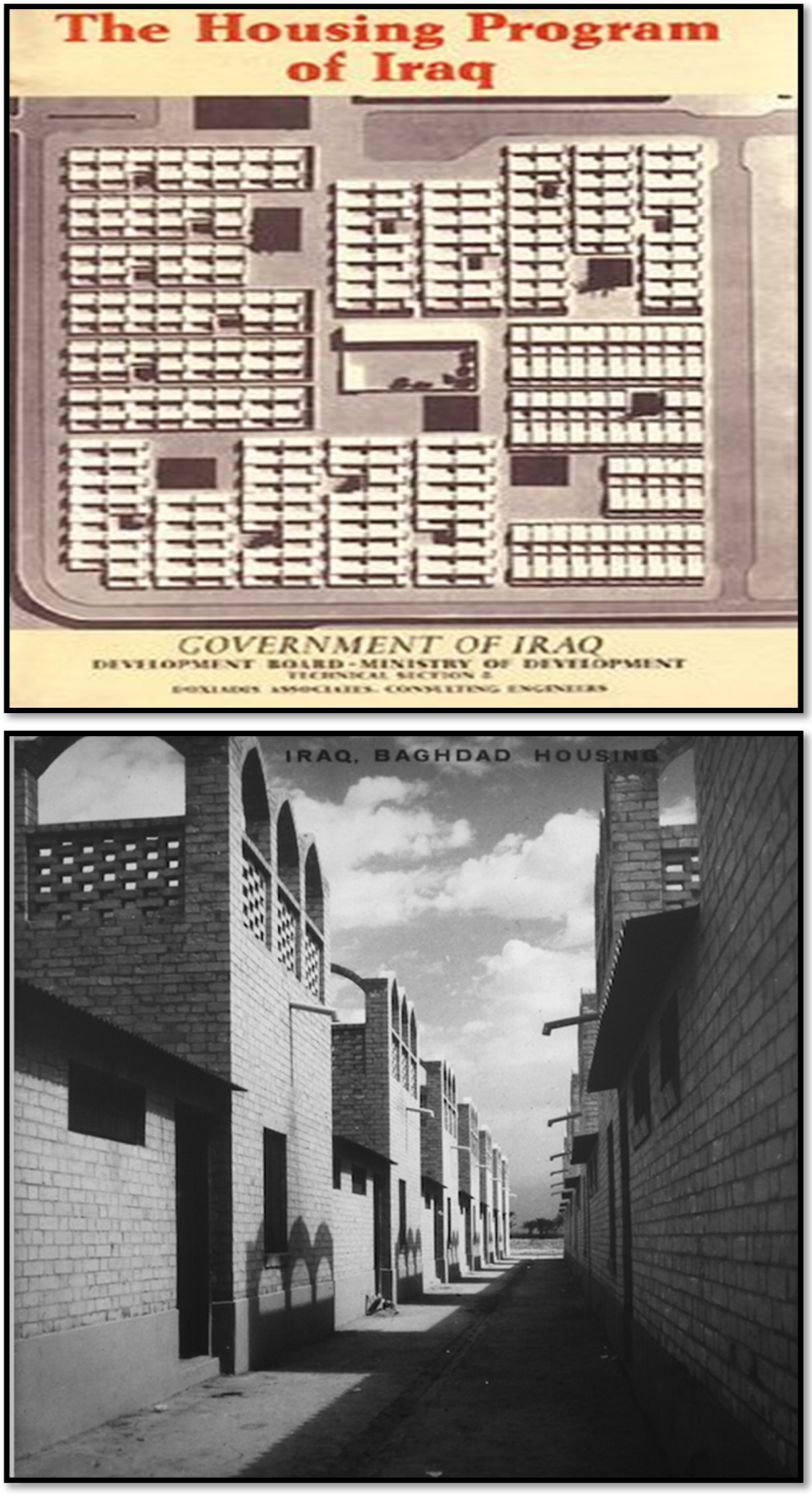


Figure 3-36: The Residential Area in Baghdad – Doxiadi

3.6 Summary

This chapter discussed the main issues of architectural identity in Iraqi built environment, in addition to the key factors that play the key role in the formation process of this identity. The chapter illustrated the effect of the Islamic religion on the city planning. The chapter reviewed in detail the transformation that happened in Iraqi identity during the last century and clarified the main architectural trends during this period.

The main themes identified through reviewing the literature of this chapter which taken forward to develop the empirical study are (the transformation that happened for the Iraqi architecture in the twentieth century, the main trends and the features of each one, the key components of the traditional Iraqi neighbourhood, the characteristics of traditional urban fabric and traditional Iraqi house, the features of the modernization process in Iraq.

The next chapters will discuss the built environment of Basra city and clarify the features of its architectural identity.

Chapter 4: THE CITY OF BASRA

4.1 Introduction

This chapter aimed at revealing the characteristics of the architecture of the city of Basra and the factors that shaped it. Accordingly, it provides an analysis of the urban form of the city during the past century and the transformations that occurred in it. This analysis provides the basic understanding of the identity of the traditional city in the past, which can be regarded as an important guide for new designs or also provide a significant direction for a future approach that may help to maintain the identity of the built environment. Furthermore, this chapter clarifies the features of both the traditional and the modern houses of the city.

The chapter discusses in detail the expansions of the city during the twentieth century and reviews the main masterplans of Basra, with mention of the main actors who influenced the city planning.

4.2 Location of the City

The city of Basra is located in the south of Iraq and covers an area of 19070 km², which makes up 4.4% of the total area of Iraq. Basra is bordered by Iran and Shatt al Arab from the east, by the Arab Gulf and Kuwait from the south, by Muthanna city and Saudi Arabia from the west, and by Misan and Thi Qar city from the north, Figure (4-1).

Basra city centre is located along the banks of the Shatt al Arab, a river with a bank approximately 20 km² in length on the eastern side. Six main rivers, (including; Al Sarraji, Al Khora, Al Ashar, Al Ribatt, Al Khandaq and Al Jubaila) cross the city, branching out from Shatt Al Arab, which borders the city from the western side.

Basra is the sole location of a maritime port in Iraq, and it is also an important industrial hub. Furthermore, Basra is an important centre for agriculture, due to the large number of palm trees which grow in the city. Additionally, the city's land is rich in minerals, and included within its subsoil are the largest deposits and wells of oil in Iraqi. Basra's reserves of oil and natural gas are of the largest in the world, and moreover, Basra contains some strategic industries, such as iron, steel, fertilisers, paper, and petrochemicals. The city covers a

considerable distance, and is located on Iraq's borders with three other countries; Kuwait, Saudi Arabia and Iran, with a total border length of 2307 kilometres. In addition, the entire maritime border of Iraq is within the boundaries of Basra city.

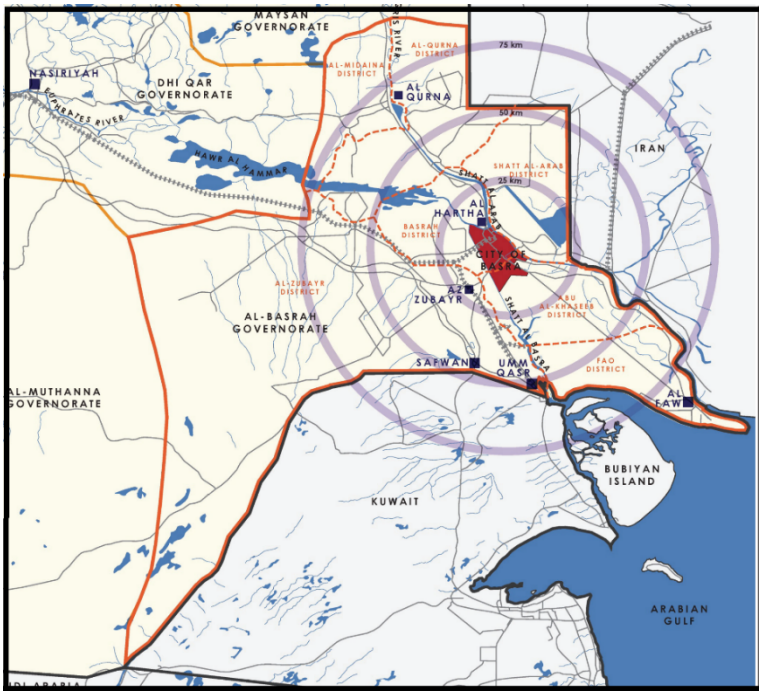


Figure 4-1: A map of Basra and its borders

4.3 Historical Background of Basra

The city of Basra has a long history which can be traced back to the time of the illustrious Babylonian ruler, King Nebuchadnezzar (605 – 562 B.C.). The ruins of the historical city of 'Tridon' have been located to the south of the town of Al Zubair - within the present metropolitan district of Basra, and date back to his rule (Al-Muzaffar, 1988). More than a thousand years later, in 635 A.D., the Muslims founded Basra, which was, therefore, the first Islamic city established by Muslim Arabs outside the Arabian Peninsula (Bazi, 1989).

The city of Basra is rich in important historical landmarks, including mausoleums and shrines, which are the most significant elements of religious interest and tourism attraction Figure 4-2. The vestige of the historical City of Basra and the remains of 'Al Masjid al Jaami' collective mosque Figure 4-3 purported to be the third Islamic place of worship ever built, are located approximately 12km to the west of the current city. Throughout history, Basra has been considered a venue for growing of the Arabic city and an important centre for literature and religion.

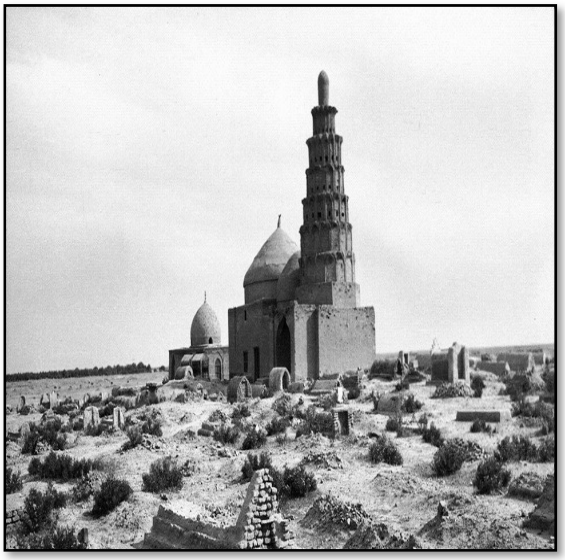


Figure 4-3: Shrine of Al-Hassan Al-Basri

Figure 4-2: The Minaret of the First Mosque of Basra (Third Mosque in Islam)

The city has withstood several transformations since its foundation. During the first stage, Basra served as an outpost where soldiers would spend the winter months, or retreat after fighting, hence the city consisted of a military encampment formed using tents, rather than a city with permanent buildings. Throughout the second stage, a mosque, a principality house, a prison and furthermore, homes for the soldiers were built using reeds sourced from the local area. Later, a large fire swept through the settlement and destroyed it. During the third stage, which took place circa 635–637 A.D., the structures of the religious, administrative and civic buildings began to change, thanks to the adoption of materials such as wood, clay and mud. The mosque and the principality house were entirely rebuilt using such components (Al-Ali, 1988).

The planning of the city of Basra was the first attempt of urban planning in the Early Islamic Age. The mosque was located in the centre of the city, next to the house of the governor and the treasury house, and the market and residential areas were built within their surroundings, with all streets and alleyways orientated towards the direction of the mosque (Al-Ali, 1988). However, in the case of the current city of Basra, the rivers have been adopted as a foundation in the formation and planning of the city.

The creation of the city of Basra was associated with the digging of the Ashar River, which has been used for irrigation and transport purposes, and possesses many vertically branched waterways. Furthermore, five additional rivers, each also containing vertical sub-rivers (Khorrah, Seraji, Khandek, Jubaila and Rabat) were parallel to the river of Ashar. Thus, a network of vertical water channels was formed, and the layout of the houses built within the sectors was influenced by the rivers Figure 4-4. Many of the rivers were later landfilled and replaced with streets. Therefore, the planning of the city adopted the network form, which distinguished it from the rest of the cities which followed the central planning style Figure 4-4.

The next important stage was the Ottoman occupation, which began in 1534 A.D., and can be subdivided into two periods. The first, which was characterised by disorders, excessively centralised control of the land and its use, and by the incompetence of the rulers, ended in 1859 A.D. The second period coincided with the office of the Wali of Baghdad; Midhat Pasha, which was, on the contrary, devoid of conflicts and instability. Throughout this period, plots of land owned by the emirate of Basra were made available to the population for the purpose of construction, which reinvigorated the city. A municipality office and a security office were established for organisational purposes, which encouraged people to immigrate to Basra.

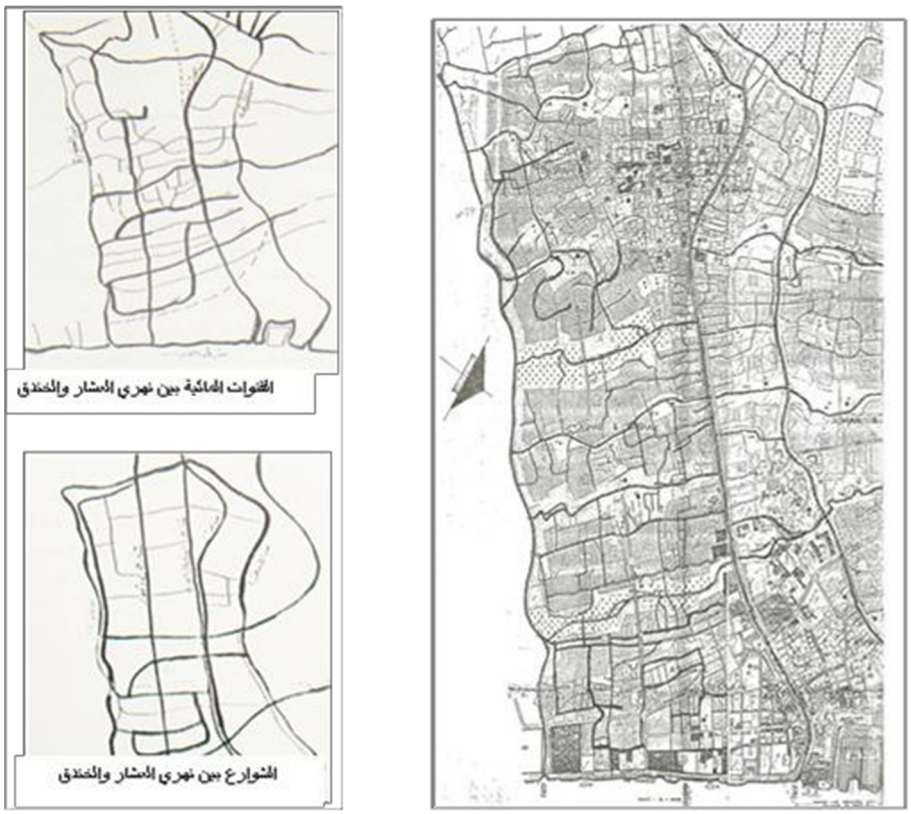


Figure 4-4: Replacing the Rivers by Streets (left), The Network of Rivers in Basra (right).

During the British occupation, the Wilayah of Basra divided the district into three ‘Liwas’ (or ‘banners’, a type of administrative division): Al Mintifig, Al Amar, and Al Basra (Darraji, 1989). Basra contains Iraq’s only maritime port. It is also regarded as vital to Iraq’s industrial and agricultural trade, and furthermore contains land rich in naturally occurring minerals, and the largest oil and natural gas reserves in the world (Alwan, 1999).

4.4 The Architectural Identity of the City of Basra

The city of Basra has an extensive history rich in culture, with an identity clearly distinct from that of other Iraqi cities, thus it is often referred to as the most beautiful city in Iraq (Al-Samarrai, 2002). Basra was previously known as the jewel of the Arab Gulf, where trade brought wealth and wellbeing. It was a city of poets and intellectuals who mingled with foreign nations and traders. Basra featured many beautiful buildings, and was traversed by numerous canals, a specific feature of Basra, to the extent that it was dubbed the ‘Venice of the East’ (Alwan, 1999) Figure 4-5.

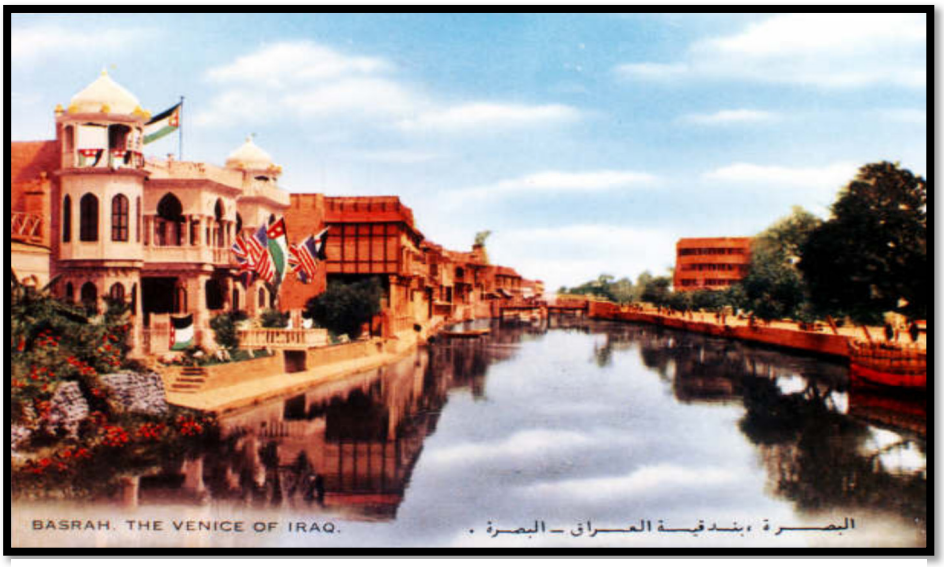


Figure 4-5: The city of Basra “Venice of the East”

Basra’s identity was formed by history, tradition, habits, topography and the climate of the city, in addition to features of Arabic Islamic cities. The cross-pollination with other civilisations through trade and colonialism has given the city particular features which distinguishes it from other cities (Al-Ali, 1988). The city was characterised by both its natural sources and its unique topography, represented by a grid of canals, and also by its surroundings, a wide marsh in the north, the desert in the east, date palm forests covering large

areas in the south, and the “Shatt al Arab” river, to the west (Musabeh, 1990). This topographical diversity had a huge impact on the formation of the city’s architectural identity.

Basra presented a unique traditional urban fabric, which consisted of clusters of adjacent houses oriented towards their interior courtyards, resulting in an organic layout of winding, narrow alleys, formed according to the location of the houses and the relationships between them. Such an arrangement aimed at providing solutions to the climate and other social requirements of the local society (Jaber, 1996). This fabric was characterised by marvellous architectural elements, which constituted the city’s unique and valuable heritage (Al-Ali, 1988). The cultural aspects of Basra’s community have played a significant role in the formulation of the characteristics of the city, and this is clearly reflected in its productions, including the city’s architecture and planning (Bazi, 1989). The formation process of the city was determined by many factors, such as the building materials used, Islamic philosophy, and the Arabic lifestyle, which entails specific habits, traditions and ethics. The varied demographic composition of Basra and connections formed with other civilisations; made possible by its trading port, led to the city developing a uniqueness. Albeit now lost, Basra’s uniqueness is still largely present in the memory of its residents (Al-Muzaffar, 1988).

Basra’s city centre consisted of two areas up until 1935: The Ashar area, which was characterised by the linear central pattern and grid plan fabric, and the area of old Basra, where the organic urban fabric was characterised by the radial central pattern (Al-Samurai, 2002). Between 1935 and 1962, the urban fabric of Basra’s city centre extended eastwards in the direction of the Shatt al Arab, northwards in the direction of the al Maaqal area, southwards in the direction of the Abu al Khasib, and westwards in the direction of the old city of Basra. A second expansion took place between 1962 and 1987, and was interrupted to the north by the Garmat Ali River, to the south by the al Sarraji River and the palm forests of Abu al Khasib, to the east by the strip along the Shatt al-Arab, and to the west by the Shatt al-Basra (Alwan, 1999).

4.5 Characteristic of Basra Architecture

There are several functional features distinguishable within Basra's architecture, such as; narrow roads, small external windows positioned close to one another, and the indoor orientation (Al-Atteai, 1979). It should be mentioned that all previous treatments were created in order to meet both environmental and social requirements. Since Basra experiences sunshine during most days of the year, the majority of houses were spread over two floors, and

used wood as the main construction material. In addition, the basement in Basra's houses were rarely used because of the high level of groundwater (Al-Atteai, 1979).

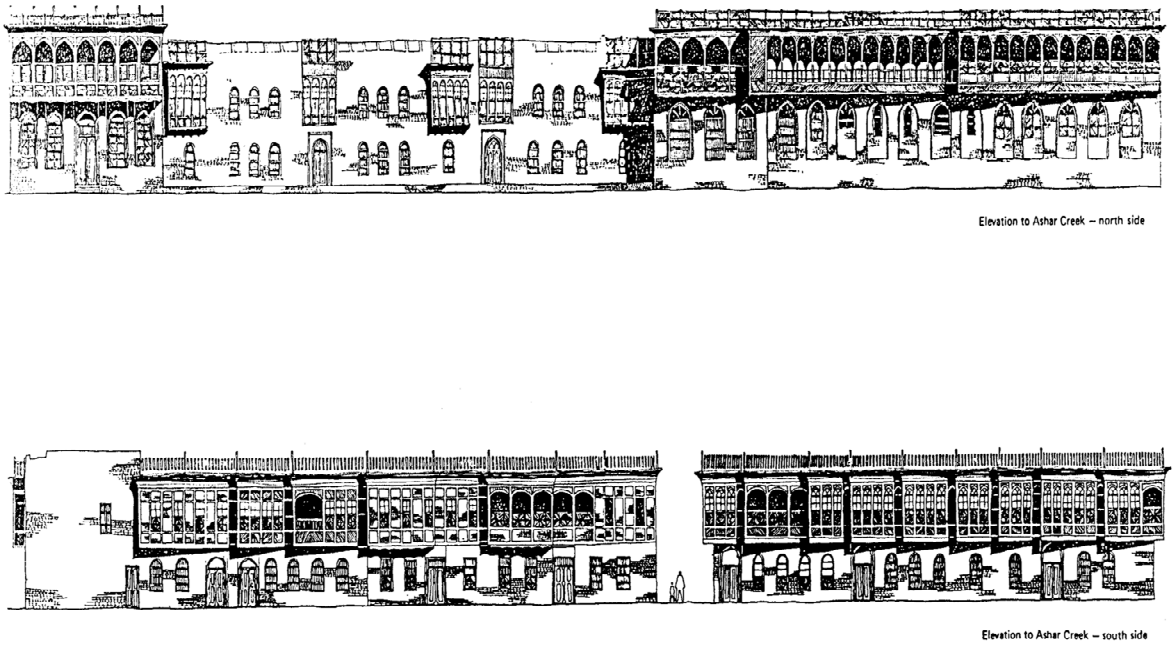


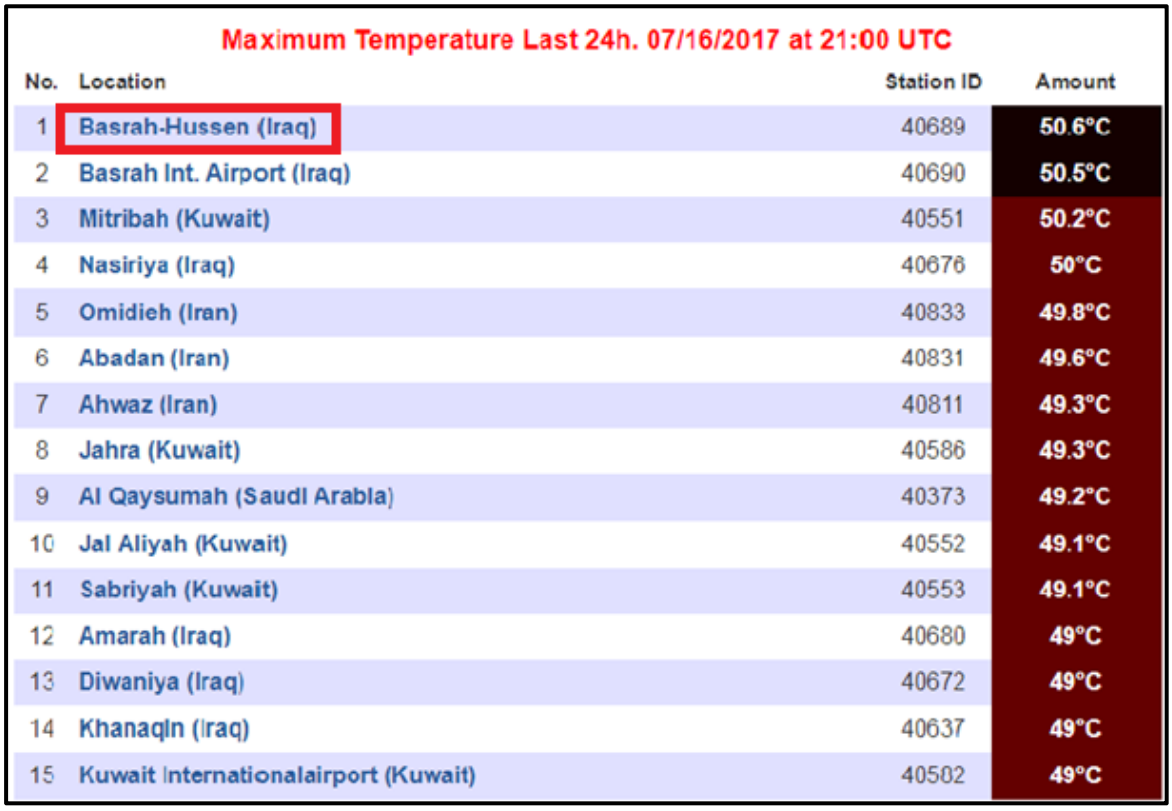
Figure 4-6: The Urban Landscape of Traditional Neighborhood in Basra

The climate of Basra city is hot on most days of the year; therefore, temperatures are high, and the sun is intense. In addition, there is little rainfall, and a high level of humidity in the summer, with temperatures in the city reaching between 47-55 degrees Celsius. Whereas in winter, the temperature is around 5-12 degrees Celsius (Saadiq, 1996), as seen in Figure 4-7. Accordingly, through their architectural plans, designers aimed to create an appropriate environment which could provide comfortable conditions for residents.

Thus, architects employed several treatments, such as:

- Creating a convergent fabric type, which led to the very close positioning of buildings, helping to provide shade and manipulate wind speeds.
- The use of thick and solid walls, which protected residents from the outside environmental conditions.
- The narrow roads and its winding shapes, as well as the covering of shanasheel, arches and balconies, creating an appropriate environment for the pedestrian.
- Using louvres for the facades in order to protect the window from the sun (Musbih, 1990).

Basra has remained Iraq's only seaport throughout both past and present Iraqi civilisations, and therefore, it has significant value. This value increased in 1870 after the opening of shipping lanes between Basra and India, which led to trade revival (Al Hayawi, 1989). After the Second World War, Iraq became the main line of trade for all neighbouring countries. Thus, the ports of Basra have been used to convey goods to many countries, including India, Australia, Britain and Turkey (Al Qaisi, 1989).



Maximum Temperature Last 24h. 07/16/2017 at 21:00 UTC

No.	Location	Station ID	Amount
1	Basrah-Hussen (Iraq)	40689	50.6°C
2	Basrah Int. Airport (Iraq)	40690	50.5°C
3	Mitribah (Kuwait)	40551	50.2°C
4	Nasiriya (Iraq)	40676	50°C
5	Omidieh (Iran)	40833	49.8°C
6	Abadan (Iran)	40831	49.6°C
7	Ahwaz (Iran)	40811	49.3°C
8	Jahra (Kuwait)	40586	49.3°C
9	Al Qaysumah (Saudi Arabia)	40373	49.2°C
10	Jal Aliyah (Kuwait)	40552	49.1°C
11	Sabriyah (Kuwait)	40553	49.1°C
12	Amarah (Iraq)	40680	49°C
13	Diwaniya (Iraq)	40672	49°C
14	Khanaqin (Iraq)	40637	49°C
15	Kuwait Internationalairport (Kuwait)	40502	49°C

Figure 4-7: The Highest Temperatures in the World by the US Measure Placerville

Considering laws and regulations, since the Basra municipality has established in 1914 during the Ottoman period, Ottoman law was applied. Later, the law of occupied cities was in use until 1920. After Iraqi independence was achieved in 1920, the laws and regulations of the municipality remained unchanged until 1930. In 1931, new municipality regulations were established, which contained many laws and legislation, such as the road and building law, which specified the setback of the building, as imitated from British law, which to dramatic change in the urban fabric (Barakat, 1984).

4.6 The British Period

Large numbers of British soldiers entered Basra, which led to huge pressure being placed on multi aspects of social life in the city. Thus, trade activity in the city increased during this period, which led to urban extension, development of the city's infrastructure (Al-Sultany, 2001), and consequently, the establishment of the railway in 1916 for military purposes, in order to connect with the ports (Hamdan, 1989). Significant architectural development occurred in the city between 1921 and 1939 with the construction of many factories, landscapes and markets. Additionally, many roads, including Basra - Ashar, Ashar - Maqul, and Basra – Zubair were established. Moreover, many government offices were erected, such as the governors building, the Royal Hospital, Basra prison, the courthouse, and the airport (Al-Omar, 1989).

Figure 4-8: British Troops Enter Basra

The main feature of the British period was the emergence of modern architectural styles, leading to the spread and increases in the use of new building materials. Although common in the rest of the world, such styles were new in Iraqi environments. During this period, there was a necessity for many types of buildings, in order to meet the new Iraqi government requirements. Many innovative and unfamiliar buildings were therefore constructed, such as airports, ministries, post offices, and cinemas (Shirzad, 2002). The British created a new style of architecture and urban planning, such as grid network planning. The results of this style produced wide streets and led to the establishment of new residential areas that did not

consider families or tribe as essential units, resulting in negative impacts on the social lives of the local Iraqi society (Peery, 2009).

Two British architects; J.M. Wilson (1887-1965) and H.C. Mason (1892-1960) played a key role in developing Iraqi architecture through their projects, which were carried out between 1915 and 1932. J.M. Wilson was appointed as the Director of Public Works in Iraq; and therefore, designed many Iraqi projects, such as Alulbayt University in 1922. Influenced by the style of Sir Edwin Landseer-Lutyens after assisting him in the design of buildings in New Delhi, Wilson utilised materials in keeping with Iraqi traditions and local techniques. Thus, his projects provided a mix of local Islamic architecture and western classical architecture. The central dome and noticeable symmetry were the main features of his projects, as well as the existence of the portico. Wilson appreciated that architecture has a significant impact on public life, and aimed to establish a new style of Iraqi architecture which was dependent on local materials, but could adopt modernity, and meet requirements of the time, whilst respecting the local Iraqi architectural identity (Caecilia, 2009).

Figure 4-9: Monument of the British Soldiers in Basra

The British architecture present in Iraq was of simple rectangular form; the buildings consisted of two floors, and the structure of the brick bearing walls was 50-60 centimetres thick. Concrete emerged as a building material during this period, which imitated the global architectural style, and precast concrete was commonly used for roofing, as well as the debuting of internal partitions made of iron and glass (Mahdi, 1989).

The main features of the British period;

- Functionality: environmental aspects of designs were considered, including the form and dimension of windows, and the height of spaces. Multiple treatments, including thick walls and arcades were adopted.
- Technology: the emergence of new spaces with wide areas (not previously a feature in Basra) using new roof construction methods such as vault construction or trusses, and the use of new materials such as gypsum.
- Form: mostly focused on building elevations, particularly the creation of extravagant front elevations through the use of multi decorative elements (Yusuf, 1982).

4.7 The Characteristics of the Houses in Basra

4.7.1 Traditional Houses

The traditional houses of the city of Basra feature a corridor, which is a gateway to the house starting from the external door, called the 'Majaz'. The corridor leads to an unroofed, open courtyard of which the doors to all rooms of the house lead off, whether they be bedrooms, or more functional rooms such as kitchens, bathrooms, and store rooms, and that is open to the windows of all rooms as well. Figure (4-10).

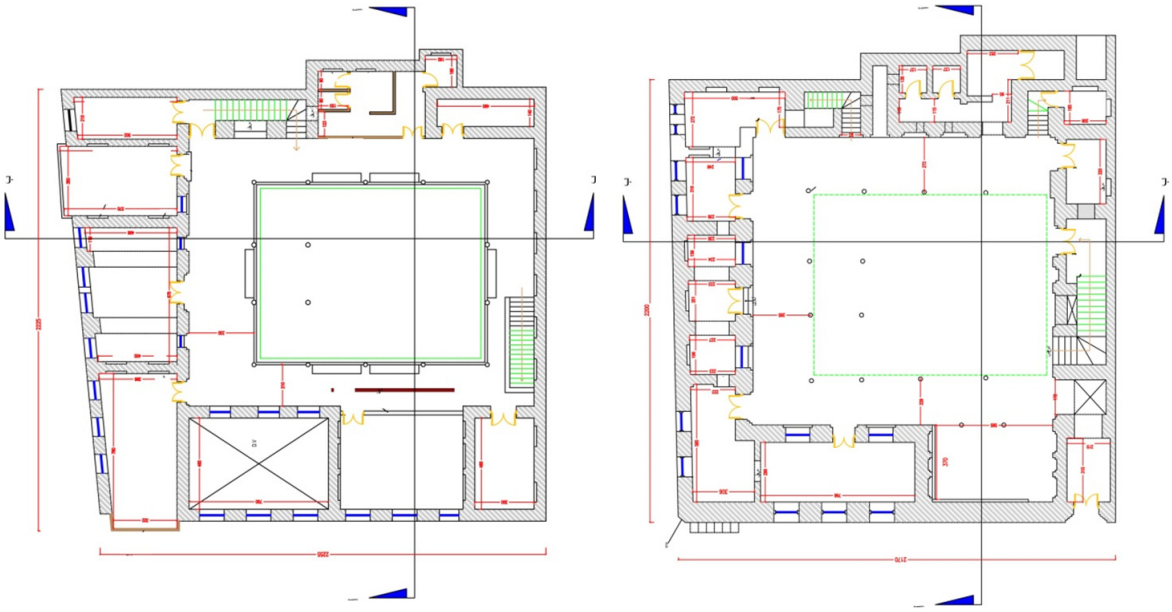


Figure 4-10: Ground and First Floor Plan of Traditional House in Basra

The courtyard, however, is usually without a roof. Occasionally, additional bathrooms and sitting rooms, intended for guest use are built which overlook the corridor to the house. These

houses are roofed using wood and reeds, and their walls are made of bricks. The rooftops are usually covered with a mixture of mud and hay. Some houses are roofed by I-beams (iron beams) and bricks, and their rooftops are covered with tiles. Floors are usually tiled with

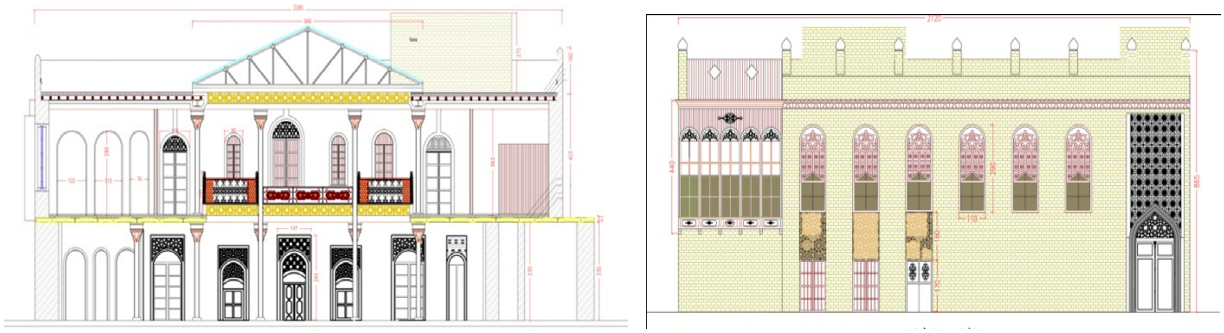


Figure 4-12: Front Facade and Section of Traditional House in Basra

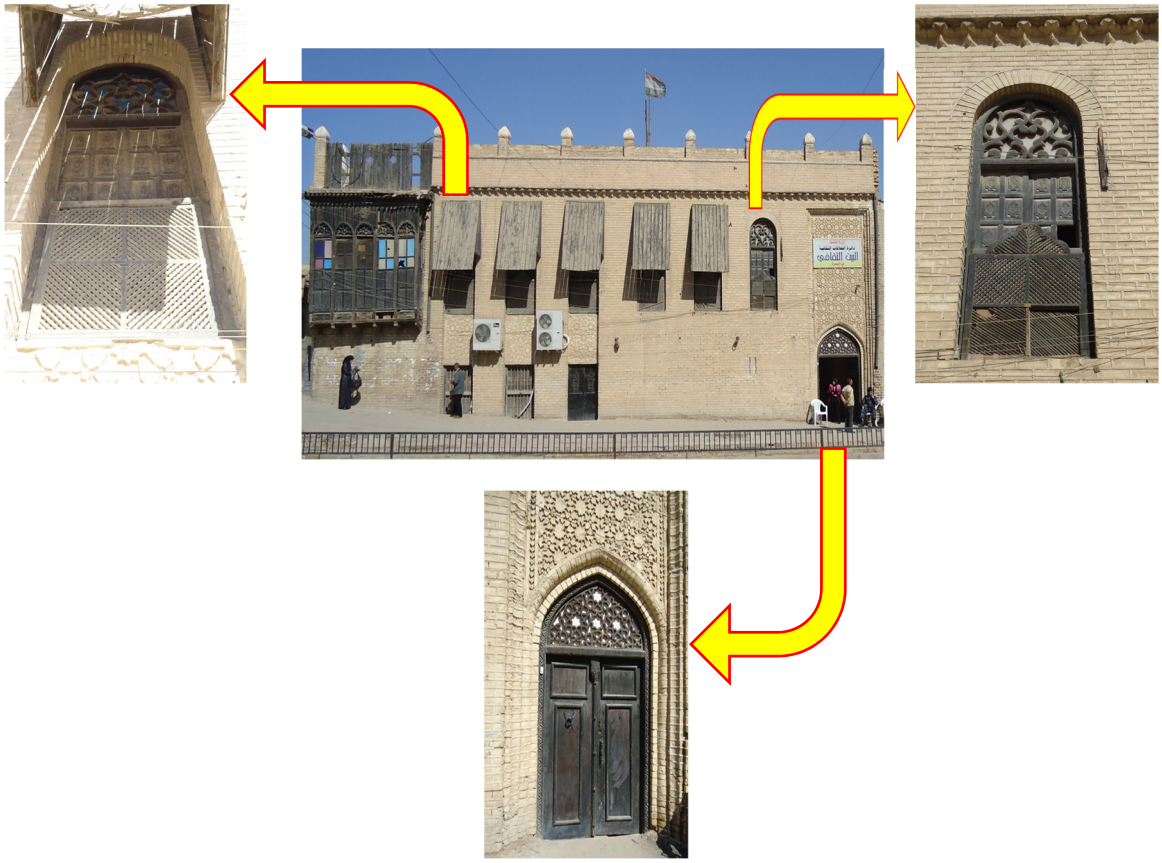


Figure 4-12: Architectural Details of Traditional House in Basra

brick-tiles (Fershi). Houses are either of one or two floors, or occasionally have a ground floor and a single room upstairs. The traditional houses do not have gardens.

The main features of Basra's traditional houses are:

- The external walls are not regular because the overlapping of individual houses, which have resulted in organic roads and winding alleys.
- Most of the houses consist of two floors.
- The facade of the house is simple compared with the interior design, particularly on the ground floor, since the external walls are solid and free from windows. However, if windows were present they were situated high enough to prevent passers-by from seeing inside the house.
- The facade of the upper floor includes a set of wooden windows with coloured glass in varied forms and also, arches of different kinds, Figure (4-12).
- Some houses have arcades with wooden ceilings based on octagonal wooden columns with upper capitals, Figure (4-12).

Some houses have varied shapes of balconies with iron rods in a spiral form, which are considered a specific feature of traditional Basra houses (Hassan, 1989)

4.7.2 Modern Houses

The modern houses of Basra usually have an entrance, bedroom, dining room, guest room, bathroom, staircase, kitchen and store. They are generally roofed; the walls are made of bricks or blocks, and the roof of reinforced concrete. The houses are usually spread out over two or three floors. They have covered stairways, their rooftops are often covered with cement tiles, and their floors are usually surfaced using mosaic or ceramic tiles.

Figure 4-13: Front Facade of a Modern House in Basra City

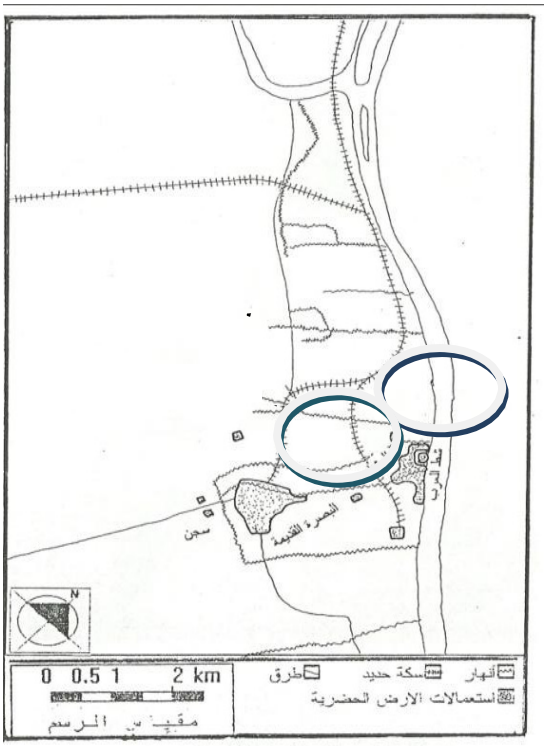
The houses usually feature a garage with a front yard, and often overlook a garden to the side or the rear. The height of the house usually ranges from 3 to 3.5 metres for the ground floor, 3 metres for the first floor, and the second and third floor can reach up to 6 metres high, with columns on the façades. White stone is usually used as a finishing material for the external facade of modern houses, as depicted in Figure (4-13).

4.8 The Stages of Basra Expansion

In 1765, the Danish voyager Carsten Niebuhr described Basra city as being divided into two zones; residential and public. The centre of the city includes nine neighbourhoods, in addition to the commercial area, which is the core of the city.

4.8.1 First Stage; the Two Nucleuses (1868-1916)

At the end of the 19th and the beginning of the 20th century, there was a clear development in the old Basra and Ashar areas, and many public institutions were established, such as a port, customs offices, a hospital, and the office of Ottoman Wali, in addition to other buildings on the Ashar river bank, and a number of homes for wealthy inhabitants. Some of the buildings were used as consulates or offices for foreign companies, and furthermore, there were several faraway cottages. Later, the Armenian Kamp was established on the south bank of the Ashar River in 1914, which indicated the beginning of the city's growth Figure (4-15).



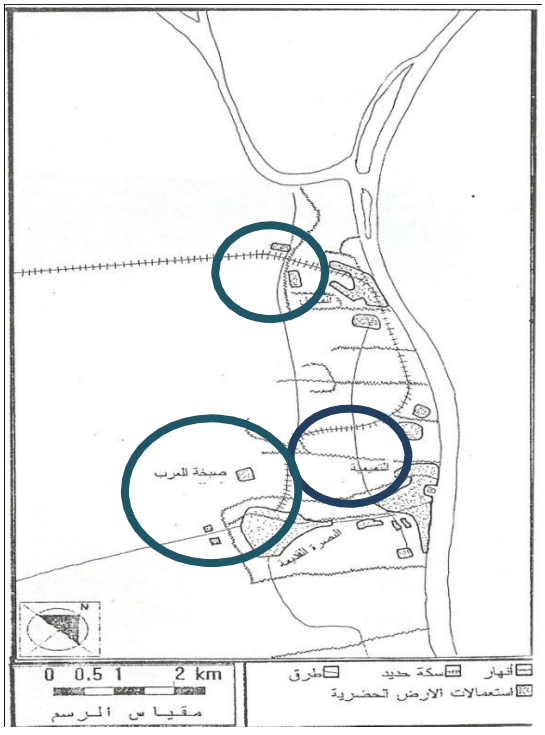


Figure 4-15: First stage (Two Nucleuses)

Figure 4-14: Second stage (Three Nucleuses)

Nucleuse

During this period, the Maqal port was established as the third nucleus of the city, and continued to rapidly expand. Many office buildings and homes relating to the port were built, in addition to the airport in 1938. At the same time, the expansion of the Ashar area (second nucleus) continued. An expansion was simultaneously carried out beside the road links between Ashar and Maqal, whilst the expansion of the Old Basra area (first nucleus) was stopped, especially when a number of commercial and administrative functions were relocated away from the area. Max Lock compared the three nucleuses of the city to the components of a human body (head, body, and hands) Figure (4-14).

4.8.3 Third Stage: The Fragmentation (1952-1968)

During the fifth decade of the last century, the phenomenon of fragmentation of the urban fabric became clear, thus the urban growth was not only around the centres of the three main areas of the region (Old Basra, Ashar, and Maqul).

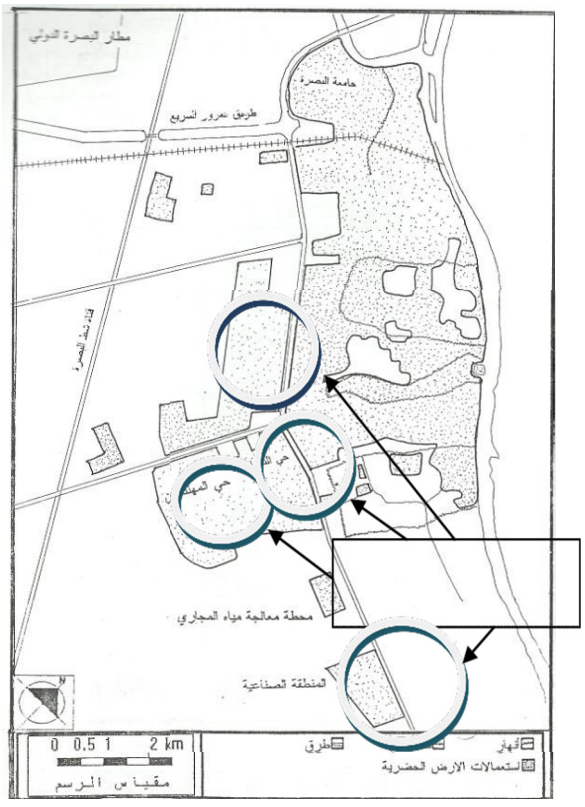


Figure 4-16: Third stage (Fragmentation)

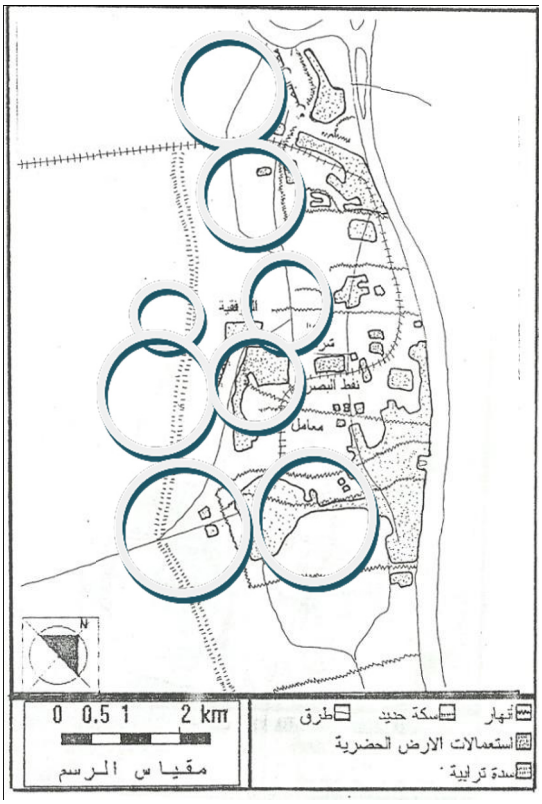


Figure 4-17: Fourth stage (Integration)

During this period, the phenomenon of fragmentation of the urban fabric became clear. The expansions were on the linking axises between Ashar and both old Basra and Maqal. Moreover, an emergence of new residential areas took place away from the urban area, where the South Oil company built the al-Mofaqia residential project, Figure (4-1).

4.8.4 Fourth Stage: The Integration, from 1969 until now

- Linked the scattered areas of the urban structure of the city via establishing new neighbourhood zones in-between, Figure (4-17).
- According to the master plan of 1985, the expansion moved to the west, and therefore neighbourhoods such as al-Baladiyat and the Engineers were established.

4.9 The Master Plans of Basra City

The period prior to 1954 was known as the pre-planning period because there was a lack of centrally focused planning and vision. The Iraqi government firstly requested the urban planner Max Lock to develop a masterplan for the city in 1956. Secondly, in 1959 Constantinos Apostolou Doxiadis was appointed, planning was taken over by Llewelyn Davies in 1965, and again in 1976 by the urban planning institution of Iraq.

4.9.1 Max Lock Masterplan 1956

In 1956, the first master plan for the city of Basra has prepared by Max Lock, from the British Consultant Office, Figure (4-18).

Max Lock described the city as "the city of canals, quiet streets and narrow alleys, its streets reminiscent of the streets of Venice, especially the paths on either side of the river, and the narrow alleys that created a romantic and quiet atmosphere". The masterplan adopted a set of proposals to redevelop the channels; the maintaining of which require a process of reviving the neighbourhoods that these channels pass through. The masterplan stated this should be achieved through the removal of derelict buildings, and the creation of new open spaces planted with trees to provide shade to the area (Al-Muzaffar, 1988).

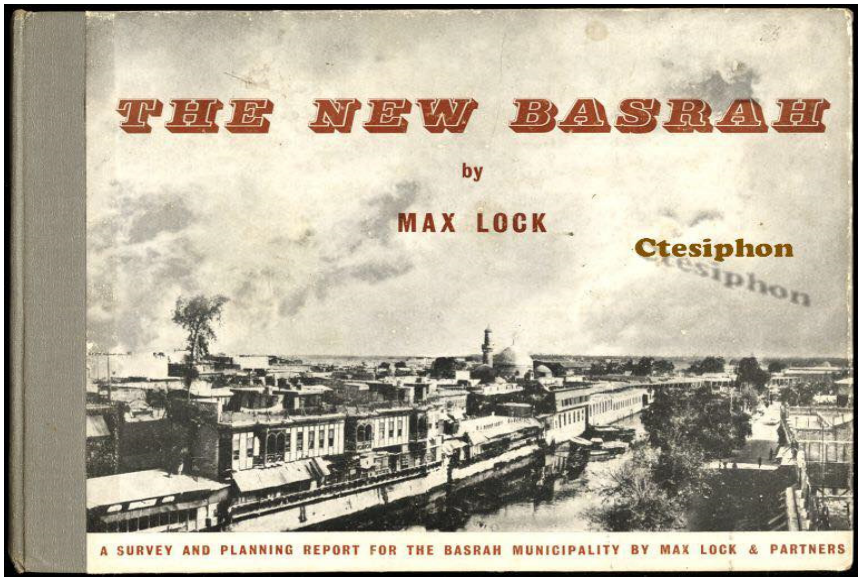


Figure 4-18: Max-lock Site Plan of Basra

Lock stressed the possibility of improving the cohesion of residents and social relationships (including communication and mobility), whilst establishing streets around the markets in a manner that facilitates movement within the neighbourhoods of old Basra. Regarding the Ashar area, the plan included removing a number of buildings to improve traffic conditions in the main streets.

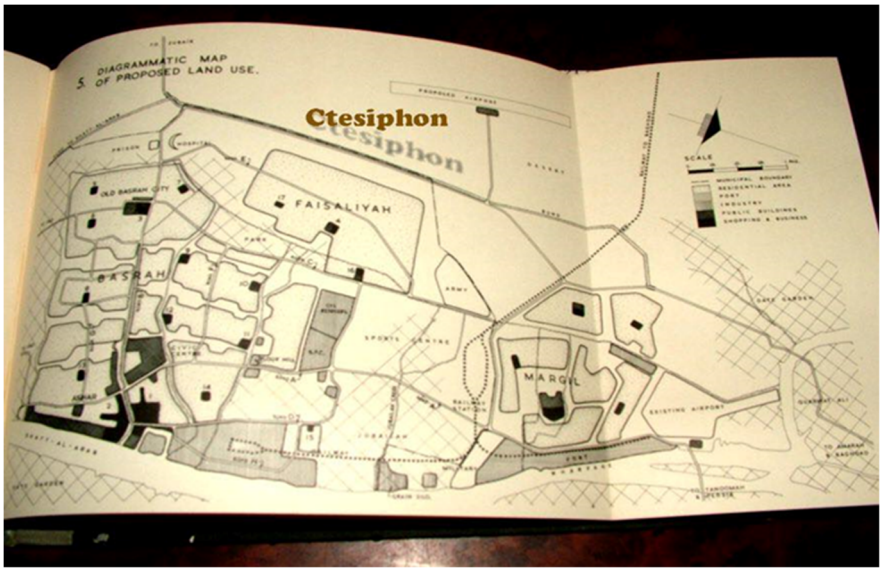


Figure 4-19: Max lock Masterplan Report

- Focused on multi-nucleuses via proposing a large sports centre between both Ashar and Old Basra and Maqal areas, through creating an isolated system.
- Suggested a railway path and oil refinery on both sides of the zone.

- Gave more attention to the main issues in the city, including flooding, groundwater, and city fragmentation, and proposed the building of dams or canals as solutions. However high costs meant the existing canals were retained and utilised. Consequently, the city expanded between the canals. The plan aimed to provide green areas along the canals, to act as the borders of the residential areas.

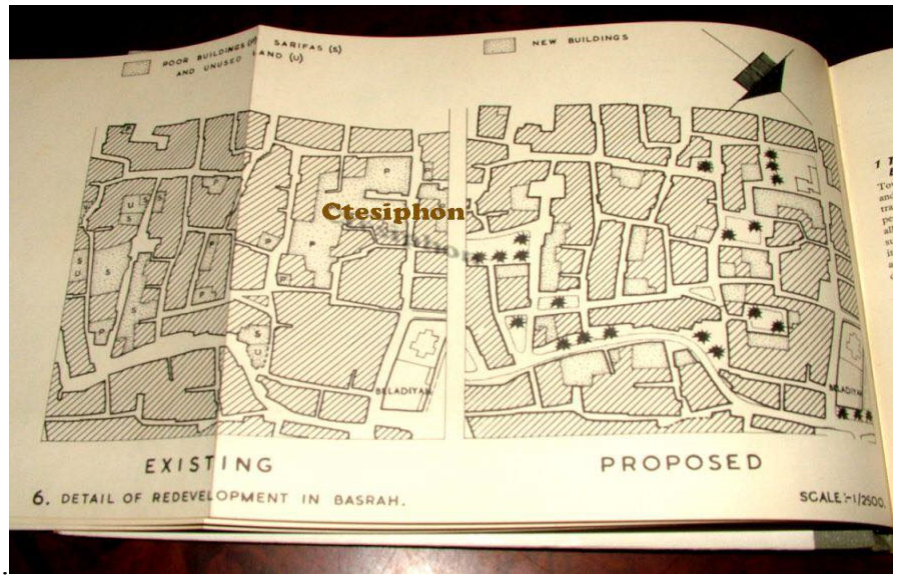


Figure 4-20: Max-Lock Proposed Plan

In Max Lock's report, regarding the situation of Basra, he strongly stressed the potential negative impact of scattered residential areas. However, this phenomenon continued, which led to the emergence of new residential areas like al Jamhoryai, al Moufquia and al Najebia, following Doxiadis' recommendations (Hekal, 1997). After 1958, the widely spread areas of urban fabric started to connect with each other, linking the centres.

4.9.2 Llewelyn Davies Masterplan 1972

The non-implementation of the Max Lock plan according to his objectives led to the re-examination of the plan and its proposals according to the developments that happened in the city in 1972 as a result of its selection as a centre for the chemical industry and marine activities. It appears that the formation of a new urban development plan and the identification of future directions for the city's expansion became necessary.

The task of developing a new plan for the city of Basra, in view of the future expectations of the city was given to Llewelyn Davies Yeang, who developed structural alternatives that considered the possibilities of expansion and directions of the city, Figure (4-22). Llewelyn

Davies Yeang proposed a new extension of the six rivers that pass through the city to the west of the Shatt al-Arab, and the linking of these rivers with each other.

The main suggestions of the Llewelyn Davies Yeang master-plan of Basra which was active until 1985, were as follows;

- The masterplan suggested several planning options, such as expansion to the west side of the city.
- Proposed a closed path (Cul-De-Sac) style inside the residential areas, in addition, to the use of curves and linear paths, which provide more design flexibility and distinguish a neighbourhood from others.
- Proposed an architectural design for the houses, based on the characteristics of the traditional houses of Basra, particularly regarding ventilation.

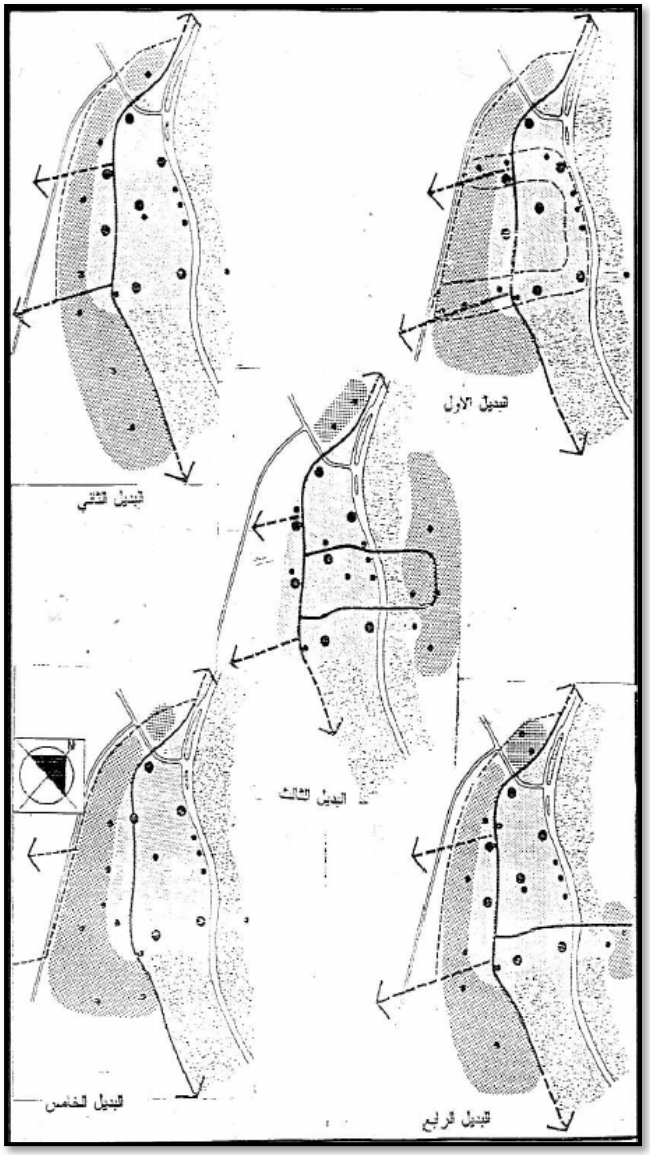


Figure 4-21: The Alternatives Designing of Llewelyn Davies Master Plan of Basra city

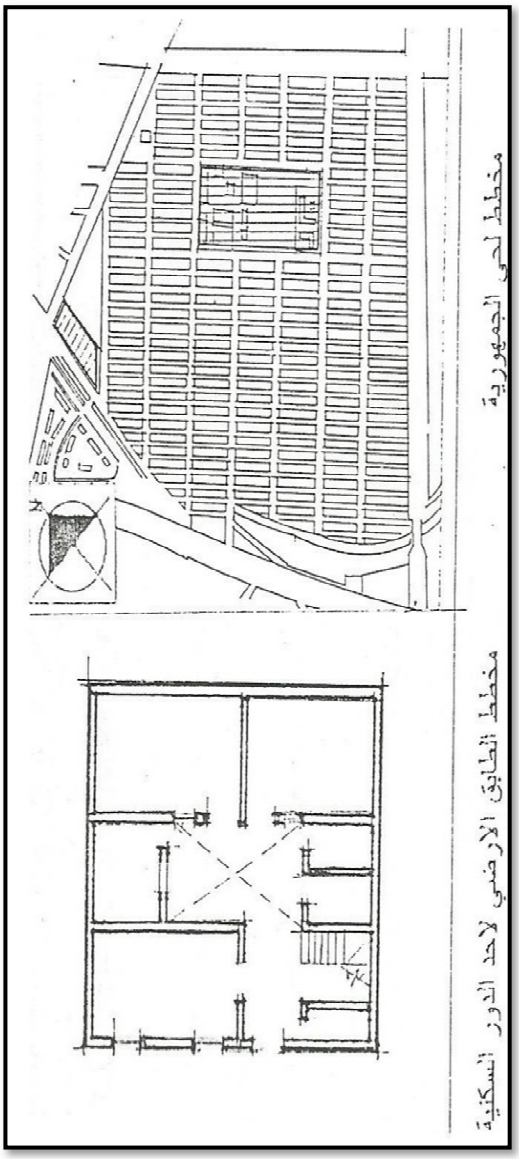


Figure 4-22: A design sample of a Neighbourhood and House by Llewelyn Davies

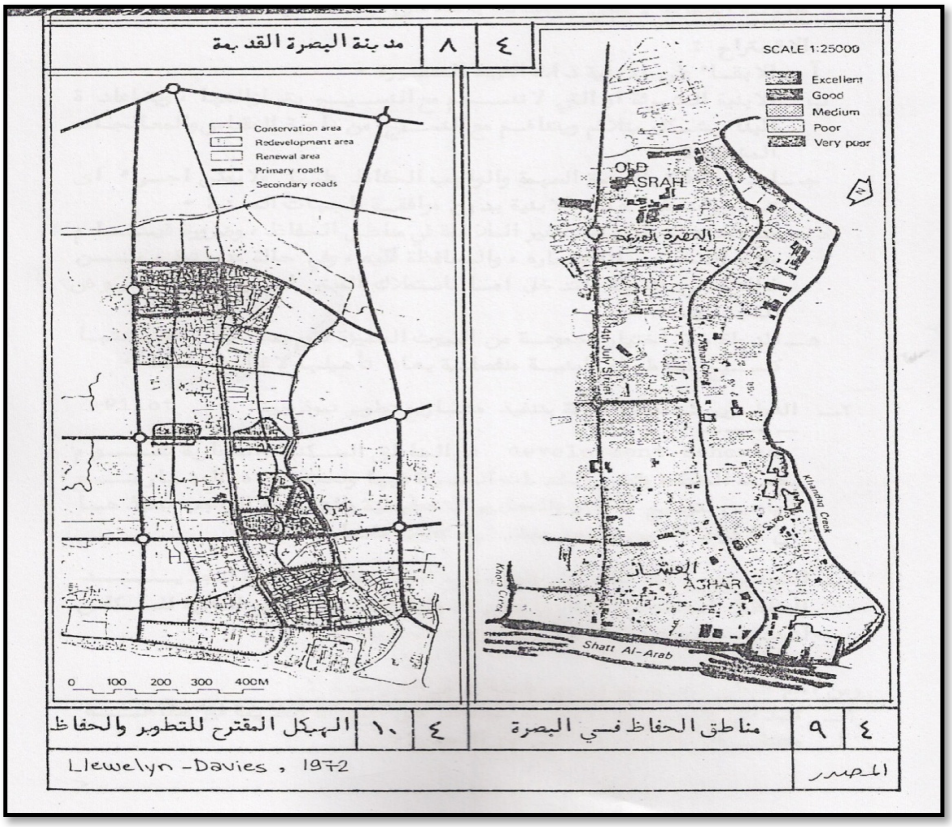


Figure 4-23: Llewelyn Davies proposed for Development of Basra City

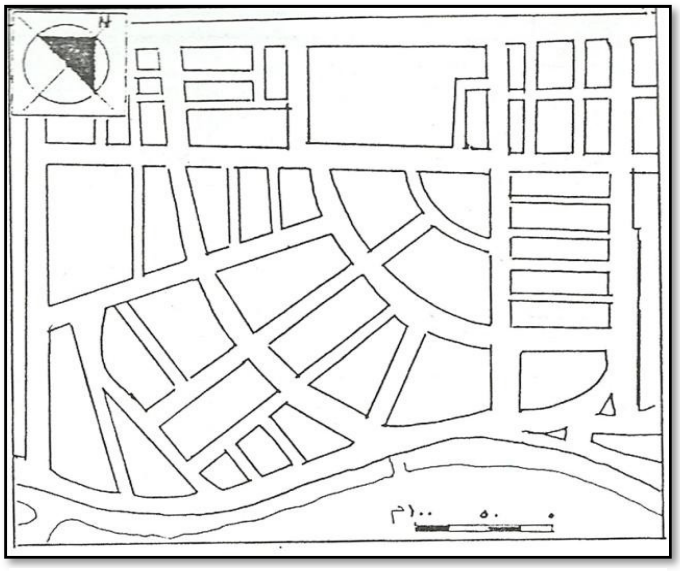


Figure 4-24: Adopting Cul-De-Sac, Curves and Linear Paths within the Residential Area

4.9.3 The Masterplan of 1985

The master plan for the city of Basra was updated by the General Directorate for Architectural Planning (in collaboration with the planning council) of the Basra province and the municipality in 1985.

The maps of the master plan show the land use, as follows:

- Implemented horizontal and vertical housing, the proposed housing, the city centre.
- Public buildings and services such as government offices, social and educational services.
- Commercial services and public buildings, industrial and storing areas, recreational and touristic areas.
- Parks and green spaces, orchards, central transport compound, central train station; Sewage center compound, private uses, open water canals.
- Train station, intersections and traffic lights, types of roads.

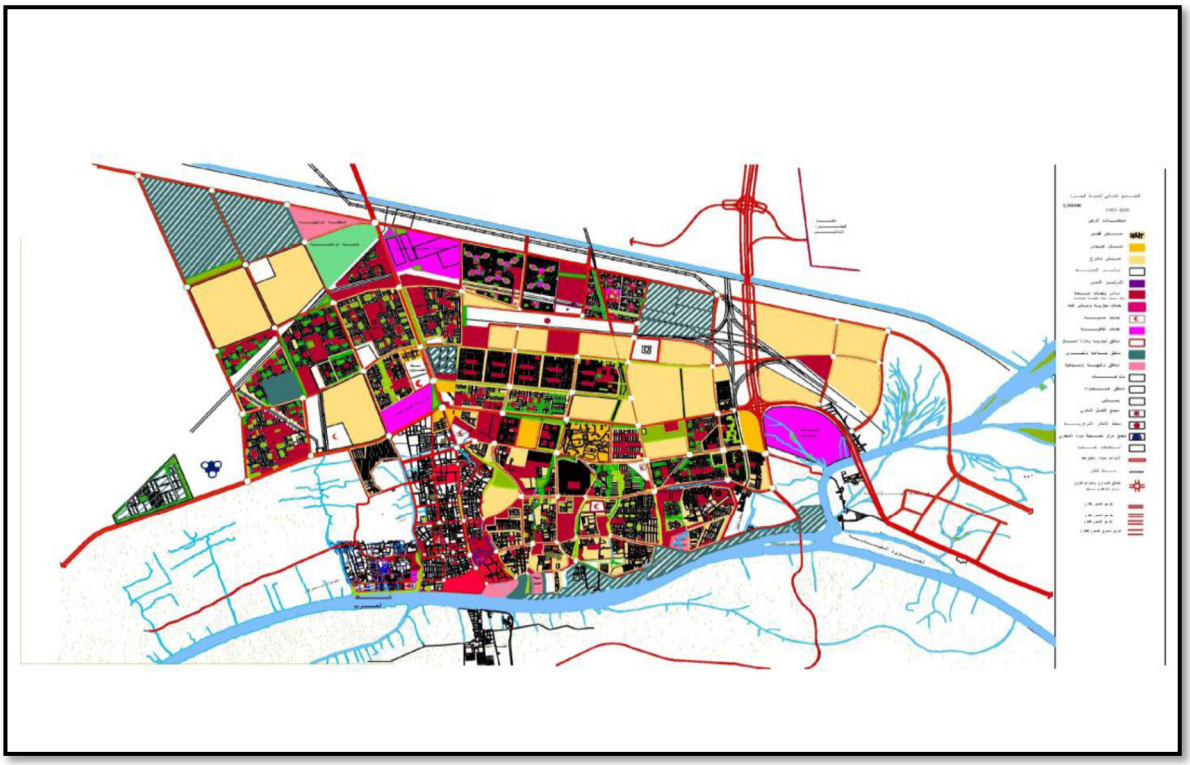


Figure 4-25: The Masterplan of Basra 1985

The main future suggestions of the master plan are;

- A suggested expansion toward Zubair city at the west. Thus, the new residential areas will be built on both sides of the road between Basra and Zubair toward al-Basra River, Figure (4-25).

- Improvement of the drain off of the main six rivers and padding their course, as well as connecting every two rivers together in order to ensure effective water flow.
- A proposed extension of the Ashar River to reach the Basra River at the west, creating vertical sub-rivers from the main river at the second stage. In addition, the plan suggests the use of these rivers for transportation and trading purposes.

However, most of these suggestions have not been carried out because of the war.

Given the many problems encountered in the implementation of many of the changes planned in 1985, and because over ten years had passed since the former modernisation plan was created, at the request of the Directorate of Municipality of Basra and the General Directorate for Physical Planning, in cooperation with the General Directorate for Municipalities, a study for the modernisation of the master plan for the city of Basra was organised by the Centre for Urban and Regional Planning of Higher Studies, and the Municipality of Basra. The group's final report was submitted in September 1996. However, the work was not undertaken due to a lack of validation. This intensive study contained a number of key indicators that conflicted with the previous master plan, and identified the problems and challenges faced by the city.

4.9.4 The Masterplan of BOCP Development 2011

On October 2008, the project named the 'Strategy of Developing the City of Basra and Modernising its Master Plan' was signed by the Ministry of Municipalities and Public Works, the General Directorate for Physical Planning, and BOCP Development (based in Prague, the Czech Republic) - the international consultant for the aforementioned project.

The aim of this mutual agreement is to develop the comprehensive strategies for evolvement and growth of the city of Basra, and to develop a practical master plan that responds to the needs and requirements of the city for a period of no less than 25 years (to come). This master plan is aimed at modernising Basra, whilst preserving the civil and cultural identity of the city, taking into consideration the local religious, cultural and social traditions, and responding to the natural environment requirements, as well as distinctive features, Figure (4-26).

The report by BOCP mentioned that the centre of the city is the focal point of commercial activities in Basra, and at the same time it is the historical and heritage core of the city. Many other cities have lost much of their historical and architectural heritage, such as the cities of the Arabian Gulf. Thus, regarding the case of Basra city, there remains an opportunity to preserve the heritage, if the issue is taken into consideration during the future implementation of the master plan of the city.

The study has recommended the need to preserve the city center and enhance its historical importance through adopting a preservation policy, which includes the overall shape of the area, its historical buildings and architectural character. The study also recommended supporting mixed land use in the main streets and at the intersections.

Figure 4-26: The masterplan of Basra city by BOCP Development, 2011

4.10 The Municipal Laws and Legislations

There are four main stages of the municipal legislations of the city of Basra. The first stage was from the establishment of the municipal of Basra until 1914, and applied the Ottoman Municipalities Law, in addition to the other laws that were in force. The second phase relates to the period of British occupation, during which the law of the occupied Iraqi territories was implemented until 1920. During the third phase, the municipality worked under the Iraqi government, again governed by the Ottoman municipal law, from 1921 until 1930 whilst no other option existed (Barakat, 1984).

The fourth phase began in 1931 and has continued to the present day. Termed the stage of Iraqi laws, this phase has led to the issuing of a number of municipal laws, such as the Municipal Administration Law No. 84 in 1931, the Roads and Buildings Law No. 44 in 1935, and the Administrative Law No. 165 in 1964. In addition, some judgements were issued concerning residential land plots, and urban transformations, such as Resolution No. 851 of 1979, which allowed areas of residential land plots to be 120 square metres. The law was amended in 1987, and replaced by Resolution No. 940, where the area of plots of land for residential purposes was increased to 200 square metres. In addition, a set of decisions were passed which related to the allocation of land to different classes of society, which led to an expansion in the master plan of cities, including Basra.

Another set of legislation has also issued regarding the urban fabric, such as the Free Housing Law No. 125 of 1965. Furthermore, the law of the Establishment of Housing Associations No. 73 in 1959 aided the growth of the urban city, as new neighbourhoods such as 'Andalusia', 'The Gulf' and 'Alamel' have emerged. In 1970, Resolution No. 222 was issued, which prohibited the phenomenon of the urbanisation of agricultural land, which helps to explain the lack of new neighbourhood construction within this period.

In 1979, the Iraqi government issued Resolution No. 548, which gave conditional permission to lawbreakers to own the land they had illegally occupied, providing that the land is owned by the government and does not conflict or interfere with the masterplan of the city. This decision, along with others, was considered an encouraging factor for immigration and increased the problem of land encroachment, which played a clear role in changing the urban fabric of the city of Basra during the 20th century.

4.11 The Decision Makers Changing of City Planning

Planning decisions were made by the town council until 1914. The town council's role was modest, in line with the area of the city during the first phase, and the simple and limited possibilities available. In 1915, planning decisions were transferred to the military governor, with the assistant of the planning committee, which consisted of British army officers. This continued until the year 1920 (Barakat, 1984).

Later, the town council returned to fulfill its role in making planning decisions, assisted by the municipal Engineering Department between 1921 and 1957. However, additional entities

played limited roles during this period, including the Construction Council, which approved the housing project west of Basra (the Al-Asma'i neighborhood). The use of external engineers in the municipal engineering department continued until 1956 (Turky, 1997).

In 1985, the Directorate of General Municipalities was established, which were empowered to make planning decisions. Decision making was later transferred to the government departments associated with the ministries that supervise planning and municipalities, which continued until 2003.

4.12 Influential Actors in a City Planning

There are many actors and influential in the planning of the city of Basra, the following is a review of these entities and sections, in addition to explain their duties;

4.12.1 Directorate of Urban Planning in Basra:

The tasks undertaken by the Directorate of Urban Planning in the province of Basra are:

- Preparation of the master plans of the cities of the province.
- Preparation of detailed plans for the various sectors within the master plans.
- Preparation of plans of rural villages.
- Preparation of architectural and urban studies.
- To show the schematic view for the projects within the master plans of both the public and private sectors, and according to the uses of the master and detailed plans.
- To show the schematic view for the projects outside the limits of the master plans, and the municipalities of both the public and private sectors, and in coordination with the Commission of land allocation for state projects.
- To consider the requests for land designation and ratification.
- To consider the land leasing and sale to municipalities.
- To consider the requests for acquisition of land to municipalities.
- To consider the requests for building permits within and outside the master plan except for residential houses within the master plans since they are jurisdictions of the municipality.

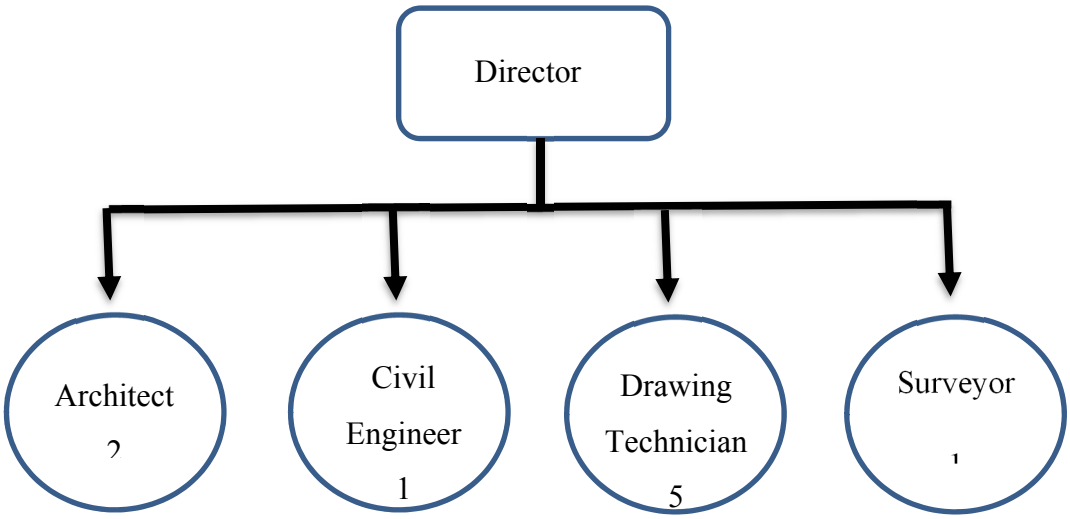


Figure 4-27: The Structure of the Directorate of Urban Planning of Basra

4.12.2 Basra Municipal Department

It includes many sections, however, the main sections that dealing with the city identity are:

- Section of the organization of cities; managed by the chairman of senior engineers with number of engineers and technicians. It includes the work with the master planning, the planning of unplanned areas, the proposal of the subsidiary and sectoral streets, land designation and the identification of its uses, and identifying the locations of buildings and streets according to the master plan.
- Section of building permits; managed by the chairman of senior engineers with number of engineers and technicians. This section includes the granting of building permits for citizens and institutions on land allocated by the laws and regulations and by the use of master plan.
- Section of numbering the residential houses and buildings; this section managed by the chairman of senior engineers with number of engineers and technicians. It includes the numbering of residential houses and buildings of all areas according to the numbering established by the specialized authorities.

The Duties of Master Planning Section:

- Town organizing
- Planning the unplanned areas
- Proposing streets
- Designating lands
- Allocating lands
- Storing maps

- Participating in all discussions and proposals of the new master plan
- Fighting squats on land and streets

Duties of Building Permits' Section:

- Granting building permits according to the master plan and land use
- Fighting the squats on the government land
- Applying laws and regulations concerning buildings
- Registering numbers and statistics of building permits

Duties of Building Numbering Section

- Preparation of numbering maps
- Setting up numbering plates for houses streets and maintaining them

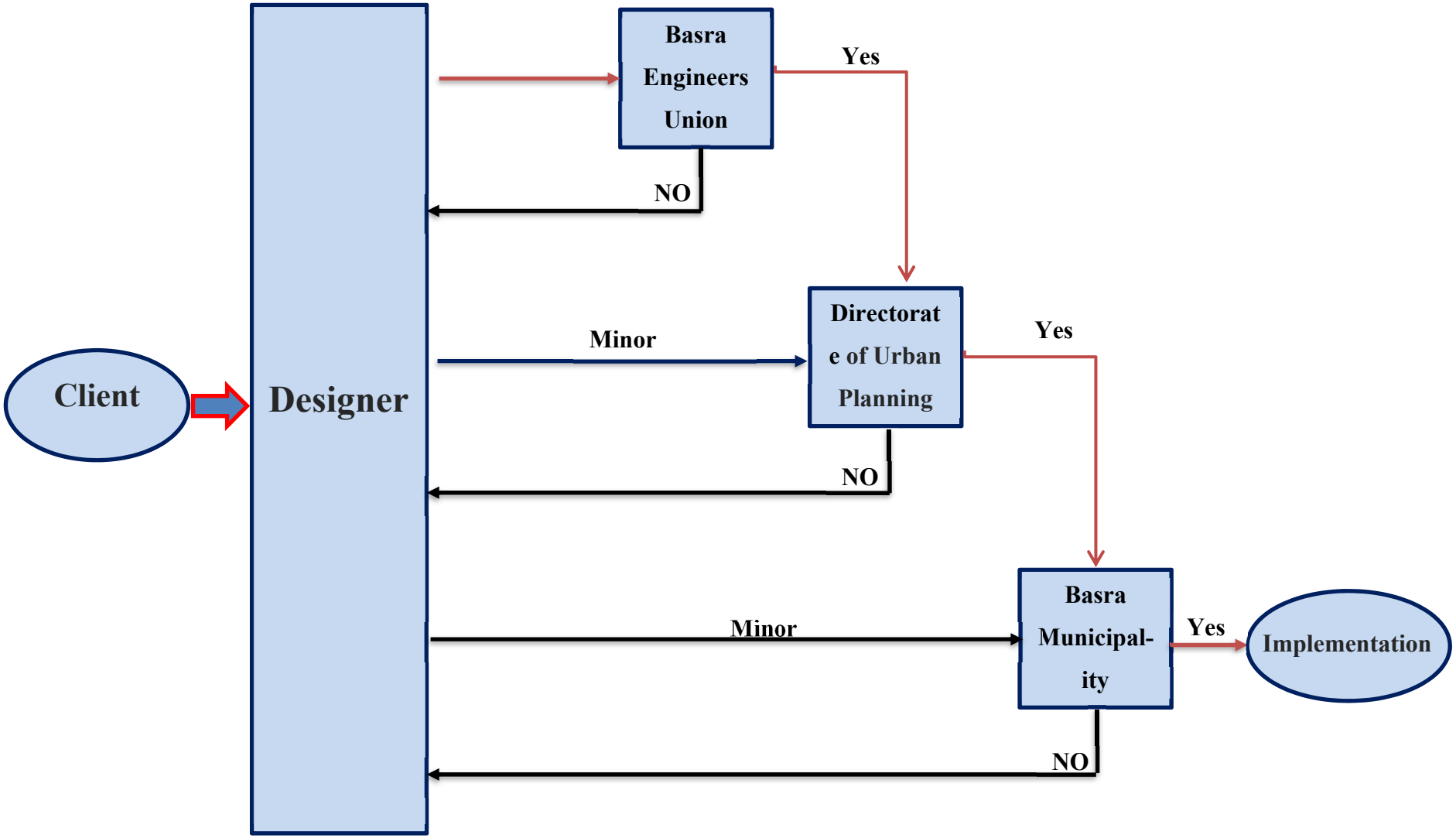


Figure 4-28 The Building Permission Process for Private Sector in Basra

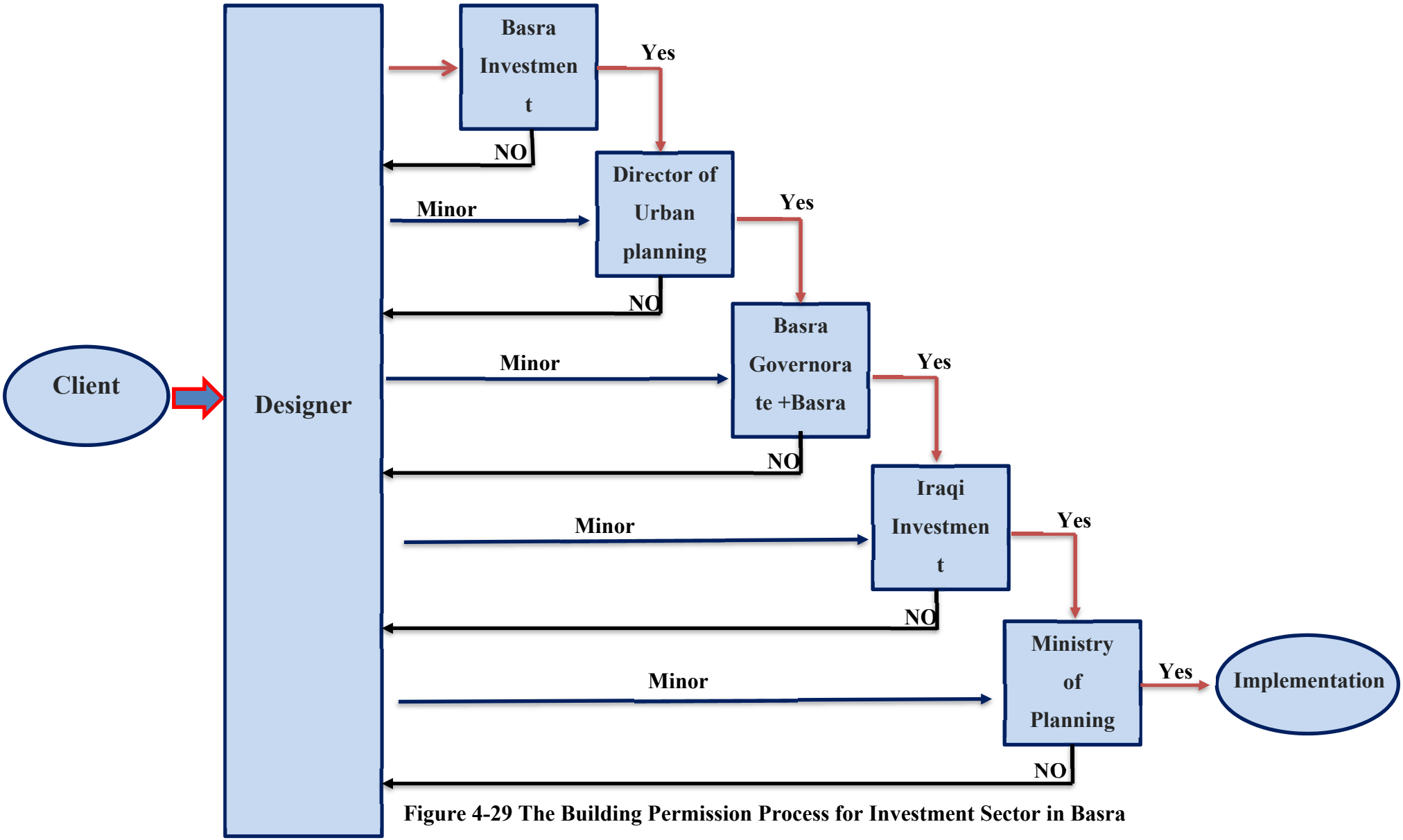


Figure 4-29 The Building Permission Process for Investment Sector in Basra

Process of Building Permission in Basra

As noted in the Figure (4-29), the building permission process can be divided into a number of steps as determined through the data collection and analysis. The process begins with the client approaching a designer for a building project whether residential or commercial or governmental. After creating a design, the designer goes through multiple stages beginning with the Basra investment authority. At this stage, it is either approved where it transferred to the Basra governorate and Basra council or it is rejected and sent back to the designer for corrections and to be resubmitted. The next stage has the Basra governorate and Basra council examine the design based on their standards. A decision is then made whether to approve or reject the design. Rejection of the design can come in two forms; if its minor corrections the design is resubmitted to the governorate and council but if it's a major correction then the designer has to resubmit back to the first step in the process which is to Basra investment authority. If the design is approved, it proceeds to the urban planning office who examine planning standards, regulations and requirements such as land use, height of the building, materials and so on. The design undergoes a similar examination as before where if rejected it goes back to the designer for resubmission to the urban planning office directly but if there are major corrections it must go back to the first stage in the process. If approved, the design goes outside Basra to central government at the Iraqi investment authority. The design either goes through minor corrections that is submitted directly to the authority or resubmitted to the first stage for major corrections. However, if the design is approved, it goes through a final check with the Ministry of Planning. Any minor corrections are resubmitted to the ministry directly or the design is rejected in which case it to be resubmitted back to the first stage in the permission process. If approved, the design goes forward for implementation and has completed the building permission process.

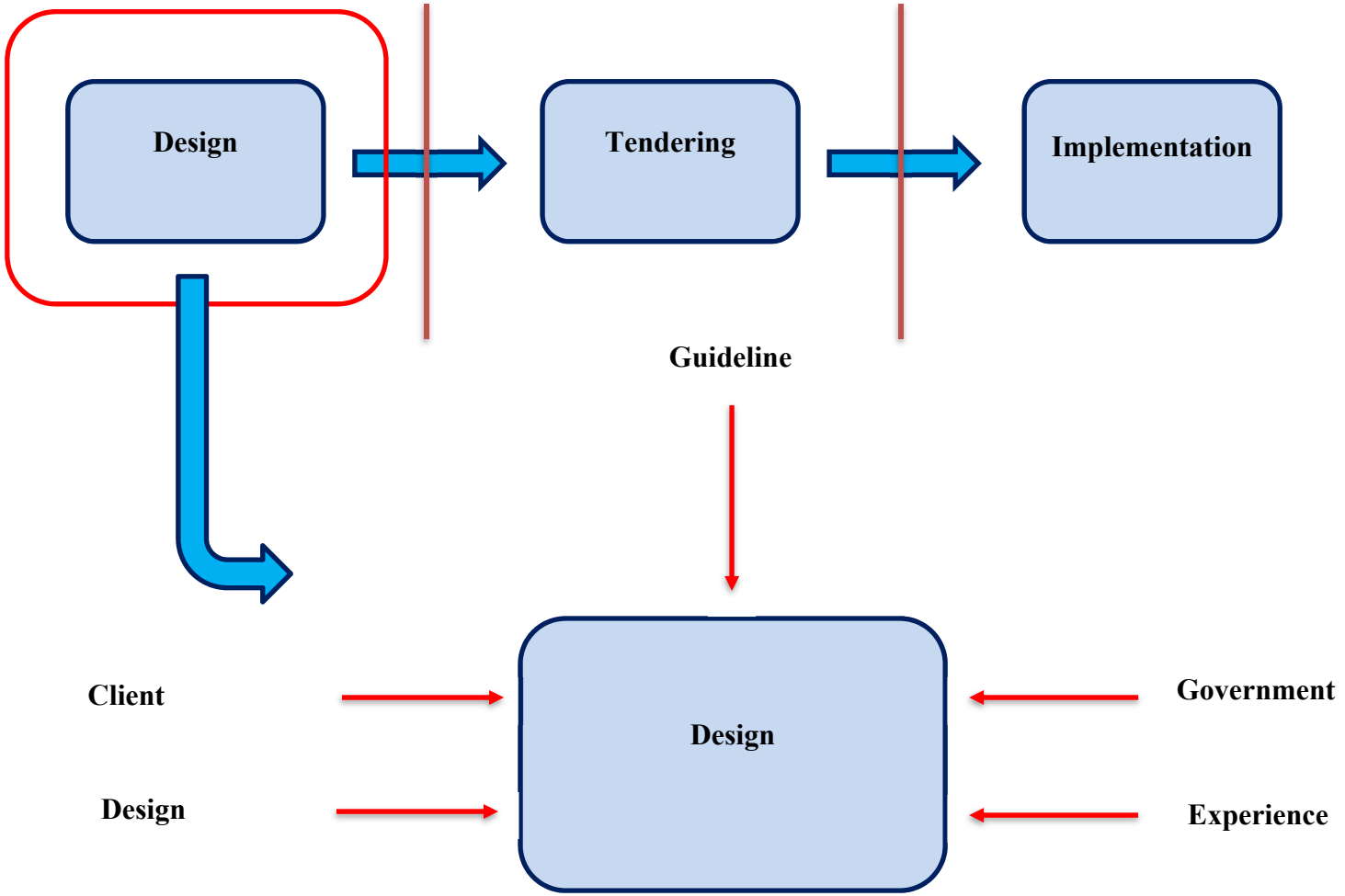


Figure 4-30:The Process of construction Project

The Figure (4-30) provides an illustration of the description of the project process. This is divided into a three stage; Design, Tendering and Implementation. The first step is the design stage includes schematics of the project including elevation, sections, details, plans and so on. Materials are considered in this part of the project process. In addition, the details regarding the construction approach are examined in the design phase. The second step is the tendering stage, which includes reports for the quantity of materials, the specification of materials and quality along with a detailed cost needed for construction. The third and final phase is the implementation stage whereby the project is put into practice onto the site.

There are number of different factors that affect the design of project. These include; client requirements, design limitations, government regulations, guidelines and experience. The client's own requirements for a project affect the design but are influenced by the limitations of the design such as cost or construction restrictions. These in turn are influenced by the regulations set forth by government or local council and the professional guidelines followed for planning and constructions. The experience of the designer also impacts upon the process. All these factors have a role to play in the project design and will affect it success.

4.13 Summary

This chapter has illustrated the characteristics of the local architecture of the Basra city, which included the main features of traditional and modern house within the city, in addition, the chapter clarified the transformations and changes in the urban form of the city and the stages of expansions that happened during the last century. Clarification in depth has provided in regard the masterplans of the city.

In regard to the laws and regulations of building, the chapter described the building permission processes for both private and investment sectors, which have affected the urban landscape of Basra, and as consequence, impacted the city identity.

The questionnaire and the interview have developed according to the main themes that discussed in this chapter such as (the characteristics of the Basra architecture, the transformation that occurred for this identity according to the expansions of the city, the

laws and regulations of Basra municipality, the influential actors on Basra city plan and development).

Chapter 5: RESEARCH METHODOLOGY

5.1 Introduction

The research methodology is an approach aimed at choosing the required tools that help the researcher to complete the research in a successful way. According to Harvey (1990), methodology is the way in which theory, method, and theory of knowledge unite ideas to analyse particular programmes within the social and physical context. In order to accomplish this, a coherent strategy and framework is essential.

This chapter illustrates in detail the methodological approach adopted in this research to achieve the objectives of the study and examine the transformation of identity in the city of Basra.

It also illustrates the research strategy choice, the data required and the data collection method, and the data analysis techniques.

The chapter is structured as follows:

- Research methodology
- Research philosophy
- Research approach
- Research strategies
- Research choices
- Time horizon
- Data collection and analysis

5.2 The Research Methodology

The definition of methodology in academic studies is a body of knowledge which helps the researcher gather different types of evidence in order to underpin the research questions (Clark, et al., 1984). The methodology, for Collis and Hussey (2009). is the overall of the research process which clarifies the approach from the theoretical foundation to the data collection and analysis. It is, as McGrath (1982) mentioned, an attempt to create a language

that can describe the relationship between the research approach and the study area. Berry (1983) linked the methodology with nature of explanation, so he sees the methodology is not related only to the collection of data and the evidence, rather it regarding the means that explanations are produced.

However, there is no one universally accepted methodology, rather a set of paradigms which used to create the undertaken research methodology. Therefore, research methodology is regarded an important to any research in order to identify presuppositions and consequence to research advances (Miller, 1983). In this light, the significant part of any research is the choice of its methodology since it provides a coherent and systematic framework during the research process. However, it's important to mention that each methodology is a unique, thus, it applicable only for its intended purpose.

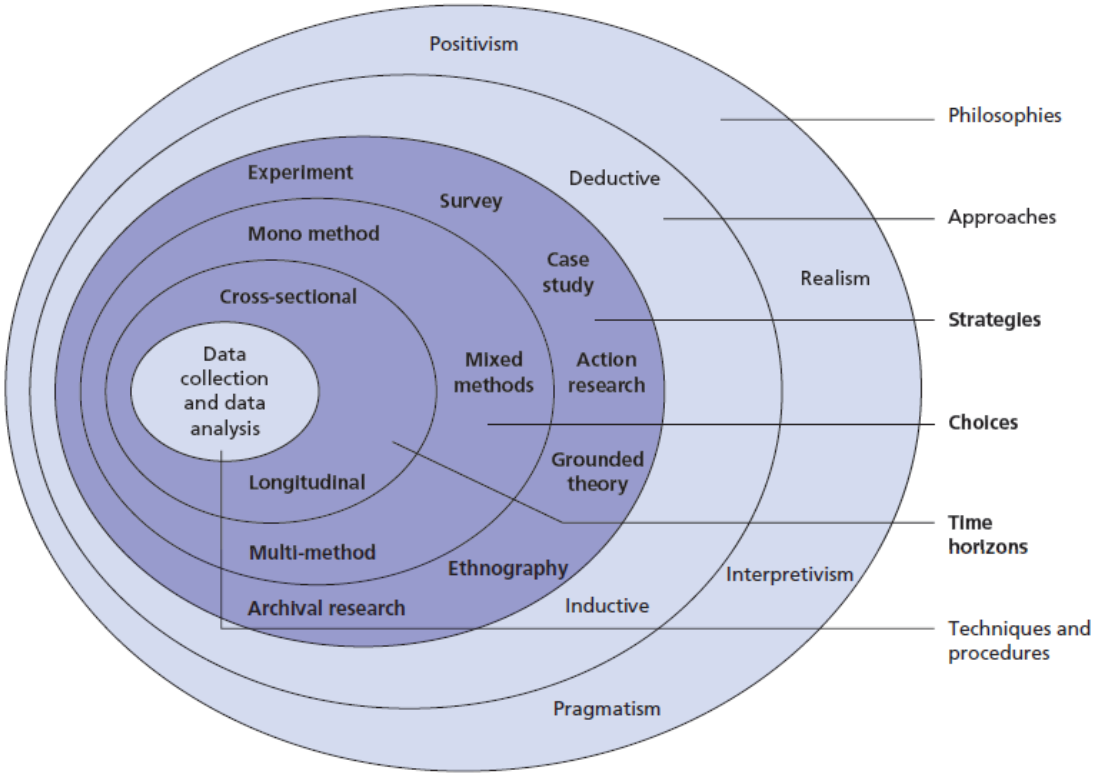


Figure 5-1: The Research Onion Model (Saunders et al., 2016)

Therefore, according to the above, the research methodology should be harmonic with the issues that be investigated. Thus, this research adopts the research onion approach of Saunders et al (2016). There are six layers in the approach, the outer layer is the research philosophy, the second one represents the research approach, and the third layer embodies the strategy, the fourth one is about the choice of the methodology, then the time horizon layer and the final layer represents the data collection and analysis, Figure 5-1.

5.3 Research Philosophy

The research philosophy represents the way in which a researcher views the world (Saunders et al. (2011). Every research has a philosophy even the developments of the knowledge including the nature of it are connected to the research philosophy (Saunders, 2012). There are three reasons as a minimum to understand the significance of the philosophical matters of any research. Firstly, it will help researchers to clarify the research design. Secondly, it helps the researcher to distinguish which design is appropriate to implement. Thirdly, to identify and create designs that may be outside their experiences (Easterby, Smith et al., 2002).There are three renewed philosophical aspects of the research, namely: Ontology, Epistemology, and Axiology.

Table 5-1: Assumptions of Research Philosophy

Ontology (The what?)	Assumptions that we make about the nature of reality
Epistemology (The how?)	General set of assumptions about how we acquire and accept knowledge about the world
Axiology (The Why?)	Assumptions about the nature of values and the foundation of value judgments

5.3.1 Ontology

Philosophical position deals with the different view of the nature of reality (Creswell et.al. 2007). This is part of the assumption that researchers have about the way the world operates. It focuses primarily on nature and its existence with assumptions proffering to answer questions on the nature of existence. The main aspects of ontology are objectivism and subjectivism.

Objectivism is the ontological position that asserts that the existence of a phenomenon and its actors are independent of each other. It is a position that holds that the goal of knowledge is simply to describe the phenomena that we experience. It stands for the existence of social entities in reality which is external to social factors and should be unbiased in its stands (Saunders, 2007). Objectivism emphasizes that the world is

predetermined nature and structure. On the other hand, Subjectivism or constructivism asserts that the phenomenon and its meaning are always accomplished by its actors. It stands for the position that social phenomena are created out of perceptions and consequent actions of those social actors concerned with their existence (Saunders, 2007). Subjectivism is an unknown reality and seen from different perspectives, it can also be referred to as interpretivism constructivism or idealism. Since the Identity phenomenon is unknown reality and seen from different perspectives, therefore this research adopted the Subjectivism as a choice for the ontology positions.

Table 5-2: Comparison between Realism and Relativism

Ontology	Objectivism	Constructivism
Truth	Single Truth	There are many truths
Facts	Facts exits and can be revealed	Facts depend on viewpoint of observer

5.3.2 Epistemology

Epistemology is the philosophy of knowledge that helps the researcher to understand what knowledge is, describes the ways to achieve it and answer the question; how do we come to know and what have we uncovered? It focuses on how can acquire knowledge and how it is used to compare reality and fiction. There are two epistemological philosophies namely positivism and interpretivism. Positivism is the search for general laws and relations of cause and effect through rationality, the positivism idea lies in the social world that should exist extremely, and should be measured by objective reasons, rather than subjectively. It represents that there is observable fact which can be observed and measured by an observer (Fellows & Liu, 2009). It is the broadest and most used philosophical position in the research process used in social sciences and behavioural sciences.

On the other hand, the interpretivist thinks that the reality can be interpreted and theories can be proposed to define new knowledge according to that interpretation. The interpretivism is an explanation of individual actions by a human in how they understand

the world (Saunders et al., 2012). Within the epistemology positions, interpretivism will be the choice of this research because the Identity can be interpreted according to interpretation and it can't be measured by objective reasons than subjectively.

Table 5-3: Comparison between Positivism and Interpretivism

Epistemology	Positivism	Interpretivism
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Explanations	Must demonstrated causality	Aim to increase general understanding of the situation
Research progresses through	Hypotheses and dedications	Gathering rich data from which ideas are induced
Concepts	Need to be defined so that they can be measured	Should incorporate stakeholder perspective
Units of analysis	Should be reduced to simplest	May include the complexity of "whole" situations
Generalization through	Statistical probability	Theoretical abstraction
Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

5.3.3 Axiology

Axiology stands for the study of values; it is the role value plays in research that qualifies findings: it is a value which is determined by objectives criteria or human belief and experience (Creswell 2012).Different people have their different opinions due to their experiences and beliefs on what the truth should be. There are two Axiological philosophies namely Value-free and Value-laden. Positivism research, deductive, objective preferences and quantitative in nature are dependent on formulating the research hypothesis and verifying them through empirical manner on a particular set of data which

is named as value- free research (Nachmias & Nachmias, 1996).On the other hand, Interpretivism (social constructionism) proposes the research as value-laden, where there is a clear interrelationship between researcher and the thing which is being explored. The human interpretation plays a significant role to determine what actually exists in the human and social world (Healy & Perry, 2000).

Thus, if the research is determined by an objective criterion, it will be value –free research. Conversely, if the research is determined by subjective criterion, human beliefs and experience, it will be value –laden research. Because of that the Identity is always determined by subjective criteri, human beliefs and experience, thus the choice of this research for the axiology positions is a value-laden stance.

5.4 Research Approach

The research approach refers to the way of defining the reasoning or logic of the research (Loose, 1993). According to Saunders (2012), the choice of a method should be guided by the research objectives and questions, the extent of existing knowledge, the amount of time and other resource available as well as the philosophical underpinning. Two methodological research approaches were highlighted by Yin (1994), the inductive and the deductive approaches.

An Inductive approach is defined as an inquiry undertaken to understand a human issue or explore a social problem from various perspectives. It starts with an investigation of an un-theorized area in order to develop a corresponding theory. The inductive research applies a less structured methodology to investigate a problem more deeply (Sutrisna, 2009). Inductive research does not propose hypotheses but is open to any results without influences of presuppositions (Glaser, 1978). The inductive researcher collects and analyses data to come up with new theories and explanations using the existent knowledge body and from them develops new findings. On the other hand, a deductive approach starts with an already existing theory and extends to its empirical investigation (Yin, 1994). Loose (1993) identified deductive research as the testing of a pre-developed conceptual and theoretical structure through empirical observation. The deductive researcher composes one or more hypotheses based on the existing knowledge body, and then conducts data collection and analysis to test the hypotheses, deductive research aligns with

the objectivist and positivist philosophical positions. In most of the research cases, it is hard to separate the two approaches. Usually, both approaches are involved; even more often, combinations of the inductive and deductive approaches are applied simultaneously (Richards, 1993). In general, a combination of the two approaches helps to more effectively achieve the specific research goals.

According to this research, both inductive and deductive approaches will be implemented. The first stage considers deductive as many theories will be applied to develop the framework. The next stage of the research, an inductive approach will be implemented in the validation part, because its combination of deduction and induction with the flexibility to move from theory to data and from data to theory.

5.5 Research Strategy

Research strategy provides the overall direction of the research including the process by which the research is conducted (Remenyi & Money 2004). The decision of the choice between different research strategies is based on three conditions: The type of research question, investigation of behavioral events, and focus on contemporary or historical events (Yin, 2009). There are different types of research strategies used to collect real data such as: an experiment, survey, case study, questioners (Collis & Hussey, 2009; Easterby Smith, Thorpe, & Jackson, 2012; Saunders et al., 2011; Wedawatta, Ingirige, & Amaratunga, 2011).

Table 5-4: Research Strategies Yin (2009)

Research strategy	Forms of research question	Requires control of behavioral events	Focuses on contemporary events
Experiment	How, Why?	Yes	Yes
Survey	Who, What, Where, How many, How much?	No	Yes
Archival analysis	Who, What, Where, How many, How much?	No	Yes / No
History	How, Why?	No	No
Case Study	**How, Why?**	**No**	**Yes**

5.5.1 Case Study

The use of Case study is particularly appropriate for individual researchers, its gives the opportunity for one aspect of a problem to be studied in depth within a limited time scale (Bell, 1993).Yin defines the case study as "an empirical investigation into contemporary phenomenon operating in a real-life context" (Yin, 1994).He states that the case study is the preferred strategy when "how" or "why" questions are being posed. This allows the researcher to determine not only what happened but also why it happened. Case studies are not limited to qualitative evidence: They can contain a mix of quantitative and qualitative evidence (Kell, 2001).Case study method is appropriate when a researcher concern is directed toward a set of issues in a single organization or a single department within it.Gary,(2014) stated that case studies explore subjects and where relationships may be ambiguous or uncertain, he added that the method is very useful where the researcher is trying to discover the connection between an occurrence and the environment in which it is occurring. the 'case study' research strategy has the feature of fitting in with different research methods and techniques to collect and analyse data, and also suitable for

conducting a research that requires a deep investigation of understanding perceptions of a phenomenon.

The research adopts to use case study, questionnaire survey, archival documentation, observation and interview as research strategies for examining the opinion of the people in the city, and points of view of the professional, about traditional and contemporary identity. As pointed out by (Yin, 1994) when focusing on contemporary phenomena, the case study method will emerge as the most suitable research strategy, as this research is focused on an empirical investigation into a contemporary phenomenon operating in a real-life context, therefore the case study methed is the approriate choice for the research strategy.

According to Yin (2014), case study design can be divided into two type; single case and multiple case designs. Then, based on the number of units of analysis, into embedded (more than one unit of analysis) or holistic (a single unit of analysis). Accordingly, there are four exist types of case study design, Table 5-5.

Table 5-5: The Types of Case study based on its Units, source (Yin, 2014)

Single Unit of Analysis	Single Holistic Case Study	Multiple Holistic Case Study
Multiple Units of Analysis	Single Embedded Case Study	Multiple Embedded Case Study
	Single -Case Designs	**Multiple-Case Designs**

The nature of phenomenon that being studied will determine the type of case study appropriate for the research whether multiple or single (Eisenhardt and Graebner, 2007). The rationality of sampling of single cases, as Yin (2014) argues, depends on the following:

- Critical case: the case would be critical to the research theory or theoretical propositions. A clear set of circumstances should specify by the theory which believed that its propositions are true. Then, a single case can use to determine if the propositions are correct or there is a relevant alternative set of explanation.
- Unusual case or an extreme case; which has unique characteristics that are not replicated in any other case.
- Typical case or common case; which represents the everyday situation of circumstances through provides lessons regarding social processes which are related to theories.
- Revelatory case; that studying a phenomenon which previously inaccessible.
- Longitudinal case; which studying the same needs at different times in order to understand the changes that occur during the time.

According to above, since the research examines the changes and transformation that happened for the identity during the last century, a single case design has been selected as the appropriate choice for this research, because the case of this research could be considered as a longitudinal type. Moreover, the nature of this research requires evaluating the transformation of architectural identity in Basra city and uses the findings along with the literature in order to develop suitable guidelines to guide the professional to maintain the future identity of the city. Thus, this corroborates the above and confirms that single case study design is more suitable for this research.

5.5.2 The Selection of the Case Study

Considering the aim of the research and the circumstances of the research problem, the number of the case studies required is identified. In addition to some other factors such as funding and time.

Accordingly, since the aim of this research and its problem concerned with the transformation and the change that occurred on the architectural identity of Basra city, three neighborhoods within the city of Basra have selected for empirical study, the selection of the areas was according to its periods of the city development. which reflects the main three periods that the identity passed through during the last century. These neighborhoods were selected according to its architectural typology in addition to architectural and urban features. The first neighbourhood is the Old Basra which is related

to the Ottoman period, the second is named Ashar which is reflecting the British colonial period, while the third is the modern neighbourhood named Jazair.Figure 5-2 illustrates the location of the threeneighbourhoods within the map of Basra city. The following is a brief description for the three neighbourhoods:

Figure 5-2: The Locations of the Three Neighborhoods within the Map of Basra

5.5.2.1 Old Basra Neighbourhood

The Old Basra neighbourhood is located in the centre of the old city of Basra. it established during the Ottoman period to be as a governmental and commercial centre for the "Wilaia" , Therefore, it contain many buildings which have built to be seat of government for the Ottoman imperial. In addition to the presence of many heritage houses which were used as the homes of the Ottoman governors "Wali", more than 82 heritage houses are still existence until the present time. The shape of neighbourhood, as shown in figure 5-3, is a triangle, it consists of six sectors, and bordered by the Ashar River from the North, while form the South bordered by the Arabian Gulf street.

The style of streets and alleys of the neighbourhood is an organic, the alleys are narrow and winding. The planning style is very complex and focused on providing high privacy to the residents through confusing the movement of strangers within the neighbourhood.

The houses of this neighbourhood have one or two floors, which all have the inner courtyard. The area of houses is small and they attached to each other. The facades of the houses are simple and contain the Shanashil on the upper floor, while the façade on the ground floor is empty of windows and if any, it is relatively high, in order to prevent the direct sight from the pedestrians in the alley.

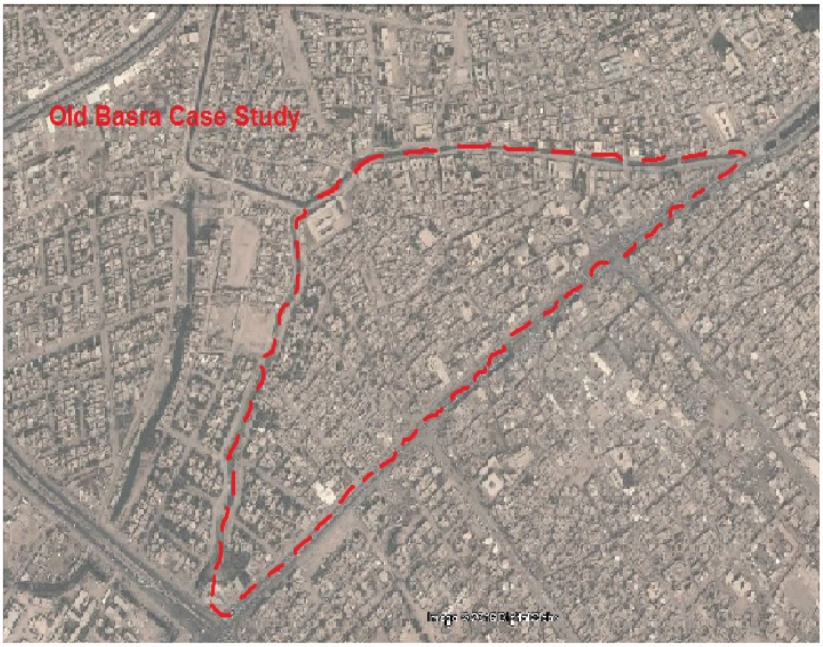


Figure 5-3: Map of Old Basra Neighbourhood

5.5.2.2 Ashar Neighbourhood

Al-Ashar neighbourhood is located in the centre of the city of Basra. It established by British to be a port of Basra city because it located on the Shatt al-Arab River. As Al-Khudhairi stated in his book, the area of Ashar may to be a Sumerian city. The port of Ashar located on the banks of the Shatt al-Arab and was receives the ships coming from India. During the Ottoman period, the area was a land of palm trees, and then the building of Al-Qashla has been built, which is the seat of the Ottoman state in the state of Basra, and then built the prison close to it. The neighbourhood involves many heritage buildings such as Al-Khudairi and Al-Maqam mosque. The neighbourhood boundaries have identified by three main rivers which are Al-Khandaq River from the North, AlAshar River from the South and the Shat AlArab from the East, while it bounded by Al Kuwait Street from the West, Figure 5-4.

The planning of the streets in Ashar neighbourhood follows the grid line style. However, within the sectors, the houses were arranged in an organic way. The style of houses design was different than what was common at that time since they follow the British style. The courtyard disappeared from the house plan and replaced by the garden, the bricks used as a building material, the facades of the houses in Ashar neighbourhood are simple, new design types of balconies used in the facades which were not familiar before. The steel structure used in the commercial buildings, and the truss commonly using for roofs in both houses and public buildings.

Figure 5-4: The Map of Ashar Neighbourhood

5.5.2.3 Jaziar Neighbourhood

Jazair neighbourhood is located in the centre of the city of Basra. A British company has planned the area in the early 1970s, its layout adopts on the gridlines network system. The streets in this area are linear with an open ending and connected with each other. The houses design in this neighbourhood follow the Western pattern, they are in rectangular shapes and the area of each house is 300-400 square meters.

The inner courtyard has been replaced by the front and rear garden, thus, the house opens outward. The facades have large windows and doors. The main building material used for the houses is the stone, especially in the facade, while the commercial buildings used

Alcoubond as a finishing material for the facades. The population density of this area is about 100-125 people per hectare (Al-Baaj, 2008).

Figure 5-5: Map of Jazair Neighborhood

The neighbourhood boundaries have identified through three main streets, while the fourth side has bounded by Ashar River which is located in the North of the neighbourhood, Figure 5-5, these streets are:

- Jazair Street; the length of the street about 1300 meters and the width is 20 meters, the width of pavement is 3 meters on each side, In addition to 4 meters as a central street pavement.
- Palestine Street; the length of the street about 1230 meters and the width of 20 meters and the width of the pavement of each side is 3 meters.
- Street of 14 July; the length of the street is 825 meters and the width is 20 meters with a central street pavement about 3 meters.

Basra has selected as an appropriate target for this study due to the following:

- Historically, Basra is the first city established by Muslims outside the Arabian Peninsula, thus it owns an important historical character making it more significant with a distinct civilization and heritage.
- Basra is currently classified as the second Iraqi city after the capital Baghdad, in terms of population and the importance.

- Economically, Basra is the economic capital of Iraq because it contains a multiple fortune; it is a richest oil city in Iraq and one of the richest cities worldwide for oil production too, and this led to:
  - The presence of oil and spread of oil fields around the town influenced on land use plan of the city, where there is a many Forbidden areas and other reserved, this led to restricting the expansion of the city, at the same time, the large population growth that happened during this period has created an enormous momentum in old city centre, in addition its influence on city planning and its capacity, thus impact on the traditional city identity.
  - The oil presence is considered an important attraction factor for workers, therefore the city suffered intense immigration from other regions, especially neighbouring regions, to obtain job opportunities, and this in turn has led to a change in the habits and traditions of society, as well as social relations, this led to a social transformation and then to the transformation the architectural identity of the City.
- Basra is the only Iraqi port of the Arabian Gulf. Thus, as with other coastal cities, it's always in the case of direct contact and on-going interaction with other civilizations through friction with the foreign community it affects and is affected by others.
- The strategic site of the city, where it is a border town with three countries that has led to cross-pollination between Basra society and the society of other neighbouring communities of habits, traditions and conventions, which in turn has been reflected in social, cultural and architectural city identity.
- Basra city is considered as a magnet for tourists, because it contains historical monuments, in addition to the attractive tourist areas with varied topographical regions, which have attracted visitors and tourists to city, therefore the identity of the city has a great role to play in enriching this aspect.
- Frequent wars have plagued the city, starting from the First World War to the Second World War and concomitant of foreign occupation, in addition to the three last wars which are clearly reflected in architecture, culture, demographic and social life of the city .All of which have had a dangerous impact on the social, cultural and architectural identity of Basra.

- Multiple and large numbers of investment companies and projects, which entered the city after 2003, especially foreign companies, which often do not respect and don't care for the privacy and identity of the city, according to a projects kind and design type, which far beyond the spirit of the city and do not reflect cultural identity.
- Based on all of the above, Basra is considered as a commercial, national, economical, artistic and historical centre. In addition the pluralism of the city makes it a gathering place for multiple cultural, social and architectural identities, which makes the identity of the city threatened and unclear; furthermore it requires further research and study.

5.6 Research Choices

Research methodological choices are divided into two major choices, quantitative and qualitative studies. The quantitative and qualitative methods are both concerned with the data collection techniques and corresponding analysis procedures.

Qualitative research is one of the two major approaches to research methodology, especially in social sciences. It involves in-depth understanding of human behavior and the reasons that govern human behavior. Unlike quantitative research, qualitative research relies on reasons behind various aspects of behavior. Simply put, it investigates the why and how of decision-making, as compared to what, where, and when of quantitative research (Khanna, 2006). Qualitative methods are used for the better understanding of any phenomenon about which little is yet known. They can also be used to gain a new perspective on things about which much is already known or to gain more in-depth information that may be difficult to convey qualitatively (Custer et al…2002).Research strategy primarily uses qualitative data sources, but in the case study stage, quantitative data becomes useful. Qualitative research seems to have a more fluid exploratory character, which means research design can be completed before the research begins (Mason, 1996).

On the other hand, Quantitative research is the systematic scientific investigation of quantitative properties and phenomena and their relationships. It is widely used in both the natural and social sciences (Asthana, 2008). It is defined as an inquiry into a social or

human problem, based on testing a hypothesis or theory composed of variables, measured with numbers, and analyzed with the statistical procedure to determine whether the hypothesis or theory hold true (`Creswell,1994). The objective of the quantitative analysis is to develop and employ mathematical models, theories, and hypotheses pertaining to natural phenomena. Quantitative research using statistical methods typically begins with the collection of data based on a theory or hypotheses, followed by the application of descriptive or inferential statistical methods. For the research choice, this research will adopt mixed method approach because it leads to a better understanding of research problems from different perspectives than either approach alone.

5.6.1 Mixed Method

Mix methods research combines elements of qualitative and quantitative research approaches for the purposes of breadth and depth of understanding and corroboration (Johanson, Onwaegbuzie, and turner, 2004). According to (Creswell, 2007) mixed methods research provides more comprehensive evidence for studying research alone. Researchers are given permission to use all of the tools of data collection available rather than being restricted to the types of data collection typically associated with qualitative tools, open-ended questions, emerging approaches, and text or image data, Or quantitative tools, closed-ended questions, predetermined approaches, and numeric data. Most researchers in the built environment over the years have used a mixed method approach to give a better understanding of the environment. There are three ways in which data mixing occurs: merging or converging the two datasets by actually bringing them together, connecting the two datasets by having one build on the other, or embedding one dataset within the other so that one type of data provides a supportive role for the other datasets (Creswell, 2007).

This research seeks to understand the transformation of architectural identity in Iraqi cities and how to maintain identity while modernizing these cities through urban regeneration projects, thus, the research will adopt the mixed method as an appropriate choice.

5.7 Time Horizon

Saunders et al., (2012) state that there are two types of time horizon in designing a research which are; Cross-sectional and Longitudinal. The cross-sectional is used to study a particular phenomenon at a particular time, while the longitudinal focuses on a particular

phenomenon and investigates the changes and developments in this phenomenon over time in the selected single case study, the city of Basra, whose identity has been investigated through the 20th century. Since this research is focusing on maintaining the architectural identity of Basra city while enabling modernization. it investigates the transformations and changes that happened in this identity during the twentieth century. Accordingly, a Longitudinal design is the time horizon stance for this research.

5.8 Data Collection and Analysis

According to Yin (2014), in the case studies, the data are collected from six main sources: documentation, archival records, interviews, direct observation, participant observation and physical artefacts. The weaknesses and strengths of the types of techniques to collecting the data show in the table 5-6. Observation is an effective method in case study research for collecting data on either a formal or an informal basis. The observation method is one of the strategies used to collect data and information in the social sciences (Robertson et al, 1996). Data collected by observation may describe the observed phenomena as they occur in their natural setting, observation methods might also be used to collect supplementary data that may interpret or qualify findings obtained by other methods (Nachmias, 1976). Also, Manning (1987) wrote that through close observation of individuals in their setting and the movement of people in their built environment we can generate data which might support, contradict or substitute for any oral records. Direct observation is used to record social attributes which concentrate on people's interaction with the built environment, and how they use their built environment and the way they represent their identity.

Documents consider a primary source of data when the people who write it are directly involved in the period of study, while if they are regarding an interpretation or judgement of the primary data, it considers a secondary source (Sapsford and Jupp, 2006).The document, in this case, can be considered as original material for the researcher. Document reviews are a useful source for data collection within case study research, to corroborate or argue against the data collected from other sources (Yin, 2014).

A questionnaire is a common tool usually used in survey research as a form of data collection and a method of investigation (Devaus, 1996 and Yin, 1994). According to (Oppenheim, 1992), the close-ended questionnaires are easier and quicker to answer and

very popular because they provide a greater uniformity for respondents. Moreover, (Robson, 1993) stated that the closed questionnaire is usually a more satisfactory way of providing empirical data. A face to face questionnaire will be adopted in the survey to achieve better communication and contact between the interviewer and interviewees. This method is very helpful in this type of study since it saves time and may be that some interviewees are not completely literature, so it reduces the need for future explanation. The interview is usually conducted to obtain data and information from the expert interviewees, especially with technical data and definitions that lay persons could not provide. According to (Devaus, 1996 & Nachmais, 1976) certain people can provide valuable sources of ideas and can help to add value to research since high-quality responses are possible and could supplement facts about the subject.

There are three types of Interviews: structured, semi-structured or unstructured. Structured interviews are verbally administered questionnaires, as a number of questions are asked which is determined in advance, with no scope for follow-up questions to responses that warrant further elaboration. Accordingly, they are quick and easy to administer and may use if required a clarification of certain questions or if there are likely to be literacy or numeracy problems with the respondents. However, by their very nature, they only allow for limited participant responses and are, thus, of little use if in-depth information is required (Gill, Stewart, Treasure and Chadwick, 2008). Unstructured and semi-structured interviews take a long time for data collection and analysis. However, they permit the researcher to follow up questions to clarify issues thus allowing a deeper exploration of the subject area (Burns, 2000). A good rapport can be built up between the respondent and the interviewer and is preferred when extensive, in-depth data collection is required (Burns, 2000). on the other hand, a limited number of people can participate in interviews due to time constraints. The main purpose of using the interviews is to fill in the gaps in information that could not be collected by questionnaire survey.

Considering the strengths and limitations mentioned above, interviews and questionnaire were selected as the main source of data collection for this study, the selection according to their appropriate to issues of the research. Semi-structured interviews and questionnaire survey were adopted for data collection in addition to the direct observation within the case study. the observation and document reviews were used to support findings obtained through the interviews and questionnaire.

Table 5-6 Sources of Evidence: Strengths and Weaknesses, (Yin, 2014)

Source of Evidence	Strengths	Weaknesses
Documentation	• Stable- can be reviewed repeatedly • Unobtrusive- not created as a result of the case study • Specific- can contain the exact names, references, and details of an event • Broad- can cover a long span of time, many events, and many settings • Access- may be deliberately withheld	• Retrievability- can be difficult to find • Biased selectivity, if collection is incomplete • Reporting bias- reflects (unknown) bias of any given document's author. • Access- may be deliberately withheld
Archival records	• [same as those for documentation] • Precise and usually quantitative	• [same as those for documentation] • Accessibility due to privacy reasons
Interviews	• Targeted- focuses directly on case study topics • Insightful- provides explanation as well as personal views (e.g., perceptions, attitudes, and meanings)	• Bias due to poorly articulated questions • Response bias • Inaccuracies due to poor recall • Reflexivity- interviewee gives what interviewer wants to hear.
Direct observations	• Immediacy- covers actions in real time Contextual- can cover the case's context	• Time consuming • Selectivity- broad coverage difficult without a team of observers • Reflexivity- actions may proceed differently because they are being observed • Cost- hours needed by human observers
Participant observation	• [same as above for direct observation] • Insightful into interpersonal behaviour and motives	• [same as above for direct observation] • Bias due to participant observer's manipulation of events
Physical artefacts	• Insightful into cultural features • Insightful into technical operations	• Selectivity • Availability

5.8.1 Questionnaire design

According to (May, 1993; Flower, 1993) the using of both closed-end and opened-end approach in questionnaire has a well-documented advantage. In addition, some questions have followed multi-choice answers. The design of questionnaire considers reflecting the aim of the research. Thus, the questions were as a translation for the main objectives of the research into particular questions aimed at getting suitable information. The questionnaire aimed at understanding the opinions and feelings of the residents towards their built environment and the identity in it. In addition to understanding their satisfaction level with the environment and adaptability with it. The facilitate a response was taken into account, simple and clear language was adopted in the writing of the questionnaire in order to be understood. In this regard (Piel, et al 1982) has stated that if the questionnaire involves simple, clear and easy answers to the questions, the results expected will be the best.

In order to make the respondents' answers easier, a simple style has formed for the questions. According to Oppenheim (1992), the easier and quicker type of the questionnaires regarding answering to be as closed-ended, moreover it more popular since it is unfirming for the respondents. The empirical data that providing by closed-ended questionnaire way is more satisfactory (Robson 1993). For Zikmund (2000), the advantage of closed-ended questions is that it requires less interviewer skill, takes less time and is easier for the respondents. For each social and environmental factor that mentioned in the literature review, there were some questions related to it. That includes privacy, safety, memory, social interaction, climate, location, and building material and so on. The questions have formulated in such a way that ease to coding for analysis. The questionnaire was comprehensive and written first in Arabic and then translated to English. The layout of the questionnaire consists of six main sections which divided into 26 questions; most of them are closed-end questions.

5.8.1.1 Pilot study

Moser (1979) wrote that a pilot study is a main and most useful tool for the surveyor. He added that it is important to ask people about things that they understand and are appropriate for research. The pilot study usually used to ensure that the way used would address the purpose that intended. Conducting a small pilot study is valuable and inexpensive (Babbie, 1998), since it prevents any unforeseen problems that may occur.

Leung (2001) sees that it is impossible, even for the experts, to get a questionnaire right on their first attempt; therefore, it is essential to pilot study before the real questionnaire. In general, it is difficult to identify a specific number for the pilot group, however, as a rule, 5-10% of the final sample number is enough (Galloway, 1997).

For this research, the pilot study was conducted in Abril 2015. The questionnaire was distributed to 12 PhD postgraduate researchers from Basra city who they are studying at Salford University, and they were asked to complete the questionnaire, make notes, and provide feedback on questions readability.

Valuable results have received from the pilot study; the results were very useful and also helpful. Some modifications have made as a result of the pilot study such as modify some questions which were not enough clear or may make a misunderstanding for the respondents. In addition to eliminating similar questions and reducing the total number of the questions from 42 to 28 to obtain more focus and broke the boring that may occur for the respondents. Moreover, the pilot study has highlighted on some gaps in some questions.

The pilot study that used in this study was a useful tool and gave more knowledge and information especially regarding the time and the way of the conducting of the questionnaire. It enabled some modifications regarding rewriting of some questions and reorganizing the questionnaire.

5.8.1.2 Selection of the Resident sample

When the population is large, it would be impractical and uneconomical to collect data from every single person in a given population, as collect data about every member of the population need a long time and costly (Collis and Hussey, 2009). The approach used for sampling is an important issue for the validity of the research. This approach related to a number of factors that affect sampling such as the size of the sample, representativeness, and access to the sample. The size of sample should be not very low and not very large, because in the first case it will be unrepresentative while in the second case it will difficult to control it since it is very large. As recommended by Saunders (2007) that it is important to ensure that the sample is not biased, and it representative of the population from which it is drawn. The sample must be representative of the majority of the population (Morrison, 1993).

According to that, the sample was carefully selected to be representative and unbiased to enhance the validity of collected data.

According to (George & Mallery, 1995) while mathematics is generally thought to be the language of science, data analysis is the language of research. (Creswell, 1994) suggests that in order to produce a significant result from the data analysis, the evaluator has to be confident and comfortable with shaping categories and using comparative analysis. The data that is collected for Comparative Analysis of the chosen case study will be analyzed by different methods. Each group of data that is collected by a certain method has an appropriate data analysis technique.

5.8.2 The interview:

For this study, the interviews with the experts are considered an essential part to collect the data, since they provide rich data within a short time. According to Marshall & Rossman (2006: 101), "qualitative in-depth interviews are much more like conversations than formal events with predetermined response categories".

The interviews could help to explore the crisis of the Basra city identity and identify the reasons that led to this crisis. Collecting data regarding traditional architecture in the local built environment in Basra is considered an important issue for this research, in addition, exploring the transformation and changes that happened to this environment and why they happened.

The selection of the people who have the ability of change the identity of the area is an important issue as it clarified by Marshall & Rossman (2006) "Elite individuals are considered to be the influential, the prominent, and the well-informed people in an organization or community and are selected for interview on the basis of their expertise in areas relevant to the research".

5.8.2.1 The Sample sizes of interviews

There are different factors that play a key role in determining the sample of the interviewees,

According to Guest et.al (2006), there are only four sources that suggested guidelines for sample sizes in qualitative research;

• According to Creswell (1998), the perfect number of the participants for a phenomenological study is between 5-25, while 20-30 is the acceptable number for the grounded theory study.

• According to Bernard (2000), between 30-60 interviews are suitable for the ethnographic studies.

• As Bertaux (1981), at least 15 interviews are acceptable number for the qualitative research

• For Morse (1994), the phenomenological studies require at least 6 interviews, while 30-50 participants are the acceptable number of the ethnographies studies.

According to Mason (2010), these are only guidelines for authors and do not mean that they should be completely followed by all the researchers. He further explains that the reason behind more participants for a particular type of study has not been stated or explained by any researcher. Mason (2010) conducted a survey of PhD theses' abstracts based on qualitative research in the UK and Ireland and he found that 560 theses varied in sample size, ranging from 1 to 95. Thus, he concluded that these guidelines are only provided for assistance and cannot be strictly followed in the real world.

5.8.3 Data Analysis

5.8.3.1 Statistical Analysis

According to Oppenheim (1992), there are two ways to analyses the data of survey questionnaires: descriptive analysis or statistical inference. There are five steps identified by Chadwick et al (1984) to be taken in the analysis the survey questionnaire which are:

1. Coding; through interpreted the responses by numbers to be easier to handling.

2. Entry of the data, through entered the data to the computer and checked each variable in order to make sure that all the answers are not illegitimate or impossible.

3. Descriptive analysis, through evaluating the distribution of the responses of the individual variables through using methods such as frequency measures of central tendency aimed at describing a central representative point (e.g. mean, mode, median), in

addition to measures of variation that shows the spread of scores around the average score (e.g. standard deviation) which is help in findings description.

4. Cross-tabulation, through examines the relationships between two or more variables.

5. Testing relationships between variables, through assessing the relationships that revealed by the data, measurements that are conducted to allow the researcher to determine if a relationship is statistically significant - inferential statistics and/or measures of association are the statistics that assess the strength of the relationship between variables. Statistical tests of significance are applied for hypothesis testing.

The purpose to use the descriptive statistical analysis is to report the findings from the data gathered, use of cross-relations is to describe particular relations between data.

5.8.3.2 Content Analysis

Content analysis is widely used in qualitative research. It is a tool or method to extract significant desired information raw (implicit or explicit) from texts or images and organize it into systematic concepts before making valid inferences and interpretation (Colorado State University, 2014).

According to Kulatunga (2007), in the qualitative research, there are four approaches to content analysis. The first is word count, counted the frequency of identified words in order to consider that the most frequent word which has used, indicates the importance of the words. The second approach is a conceptual content analysis, where a text or sets of text examine for the presence an identified concept and/or themes. The literature review could determine a concept or themes or sometime it's emerged from the data itself. The third approach is relational analysis, where the relationship between concepts in the text has analysed. The fourth approach is referential content analysis, where the researcher interprets the hidden meaning of the text after it’s examined.

For this research, the Content analysis has selected because it gives the possibility to interpret the participants' responses through multiple approaches in order to find significant statements to develop the research, Since the aim of research is to maintain the architectural identity of Basra city, the research focus on the conceptual content analysis to produce a wide vision for the city identity, where the word count function is a limited to achieve the aim of the research.

5.8.3.3 Cognitive mapping

Cognitive mapping can be considered as a technique which has used to structure the ideas and to clarify the relationships between them. According to Eden and Ackermann whom they created a cognitive mapping technique, it is a tool which can be used to structure messy or complex data (Eden and Ackerman, 1998). This view supported by Mc Donald et al (2004) who has defined cognitive mapping as an appropriate technique for analysis the disordered, difficult and interlinked issues or ideas and the factors that surround them (Mc Donald et al, 2004). The issues or ideas can be organized into a hierarchical network when using cognitive mapping. Consequently, the relationships surrounding and supporting information behind the issues or ideas can be exploited and can be clear. Thus, the cognitive mapping is a technique which helps to bridge the gap between raw data and theory building.

5.8.3.4 Comparative Analysis

According to Thomas (2003), the comparison could be identified according to the way of selecting the things, which are - similar to - or - different from - each other. Comparative analysis research methodologies have long been used in social studies especially in cross-cultural studies to identify, analyze and explain similarities and differences across societies (Hantrais, 1995). Comparative analysis methodology has been used for three types of goals: the construction of inferential histories, the development of typologies, and the explication of generalized processes (Peel, 1987).

There are five steps to derive a comparative analysis:

- Classifying the objects and choose one category, neighbourhoods as a category for this research.
- Choose any two types of objects or more within that category to compare, for this research, the types are traditional and contemporary neighbourhoods.
- Select the features or components of objects that the comparison will focus on. For this research, the focus will be on features of design such as planning layout, form styles of building, and elevations.
- Collect the information about each object and presented it descriptively. For this research data are getting from the case study survey.
- The conclusions involve the relationship between the objects similar and/or

differently. The conclusions of this research should be interested in maintaining the local architectural identity for Basra city.

The research will use an analytical method for three neighbourhoods in Basra. In order to fulfil the research objectives, the research will conduct an investigation using Comparative Analysis for the chosen three neighbourhoods.

5.9 Research Design and Process

Stage 1: The identification of the research problem from the background studies and a review of the rationale and objectives 1-3 of the study, this will be achieved by a critical review of the literature on the architectural identity process.

Stage 2: Continue the review of the literature, in achieving objectives 1,2,3 and collecting from literature, factors that influence city identity formation.

Stage 3: Review of literature and assembling of secondary data on the role of culture in the formation of architectural identity. This concludes the achievement of objectives 1,2,3 and identifies the knowledge gap.

Stage 4: Drawing from the literature and field work, a guideline to guide the urban design of Basra city and fill the knowledge gap. A review of the methodology to be adopted for data collection will be introduced, this will satisfy objective 4.

Stage 5: Having analyzed the primary data, the developed guideline will be validated with the opinion of professionals obtained by focus group, this will satisfy objective 6.

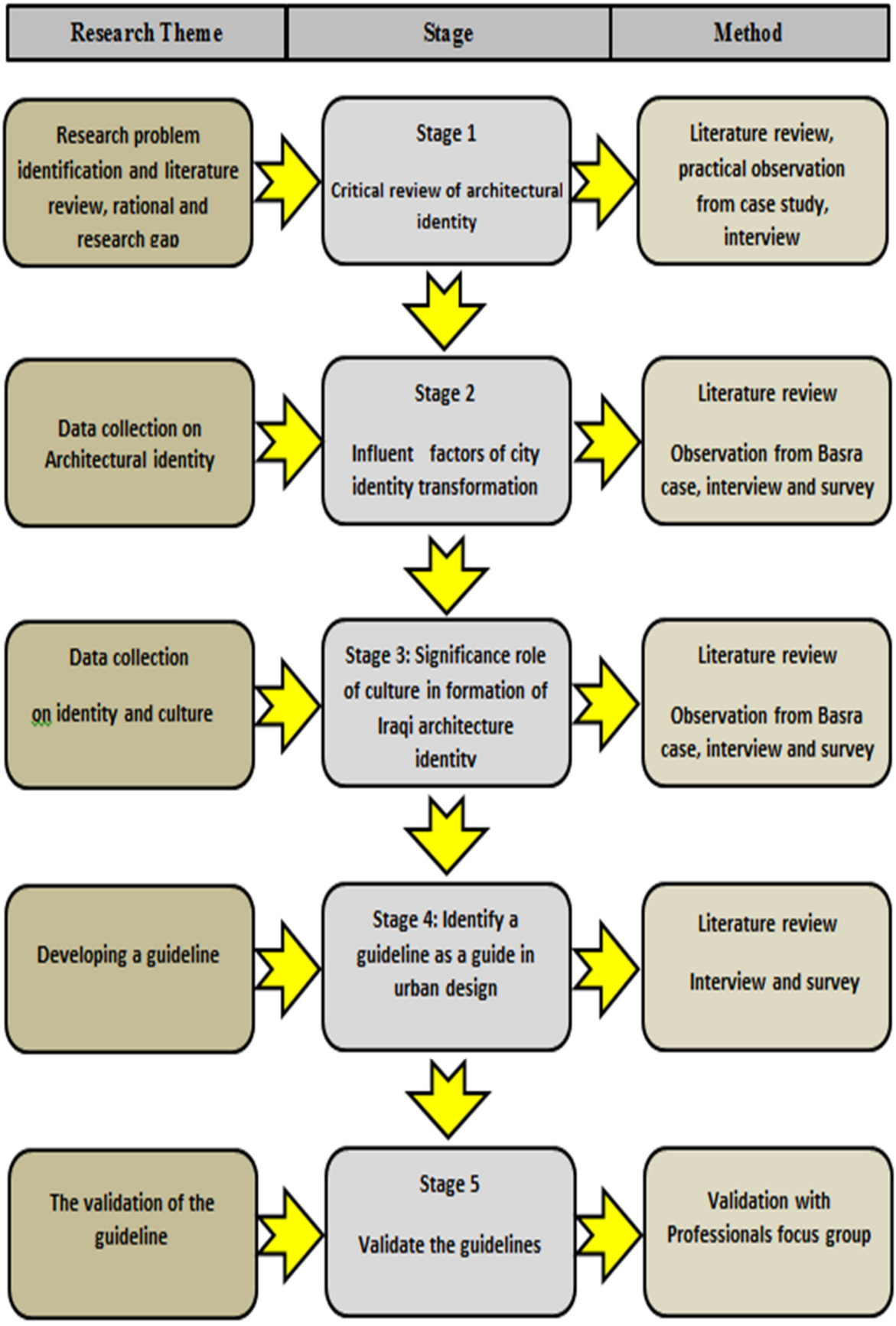


Figure 5-6: The Research Process

5.10 Summary

The chapter clarified in detailed the research philosophy, research approach, research methodology, the mixed method research approach and the two main data collection techniques; semi-structured interviews and questionnaire survey approaches were adopted for the study.

The chapter illustrated the strengths and weaknesses of the two research methodologies; qualitative and quantitative, and clarified the advantages and disadvantages of the two data collection techniques; semi-structured interviews and a questionnaire survey, in addition to justify their adoption for the study. Moreover, the reliability and validity of the methods and techniques were tested before the final survey by using a pilot study in order to ensure the reliable and consistent data. The results of the pilot study survey led the researcher to modify the questions used in the main survey.

The next Chapters will present the findings and data analyses of the semi-structured interviews and questionnaire survey for the study.

Chapter 6: QUANTITATIVE AND QUALITATIVE DATA ANALYSIS

6.1 Introduction

This chapter presents and analyses the data collected from three neighbourhoods in Basra by using different data collection methods, which are: semi-structured interviews, questionnaire survey, observation and archive document analysis. The main source of data was the interviews with professionals, who have long time experience in fields concerning with identity. The second source of the data was the questionnaire survey with the residents who live within the three neighborhoods. This chapter clarifies people's evaluation of the transformations that affected the architecture of Basra, therefore it aims at identifying the effect of the built environment on people and people's resistance to the changes and social adaptation. The chapter starts providing analysis of the semi-structured interview results obtained from the 12 experts who participated in the interview phase of the study. Subsequently, it presents the initial analysis of the questionnaire survey results obtained from the 119 residents who participated in the questionnaire survey phase of the study. The findings of the questionnaire survey are presented via a comparative approach in order to illustrate the levels of satisfaction and dissatisfaction of the residents in regard to the design of their neighbourhood, in order to reveal the failure and success of the physical environment, as the evaluation of the residents is considered a significant issue that should be taken into account. That is followed by the analysis of the observations, by means of the comparison of the three neighbourhoods. The observations and archival document results will also be used in the interviews and questionnaire survey in order to support the opinions of the experts and the residents. Accordingly, this chapter is divided into three sections:

- Interviews with professionals (Qualitative data).
- Survey questionnaire with residents (Quantitative data).
- Comparative architectural analysis of the three neighbourhoods.

6.2 Qualitative Data Analysis

6.2.1 Introduction

The research adopted a semi-structured interview technique in order to obtain maximum data from the interviewees. According to Nachmais (1976) and Devaus (1996), certain people can provide constructive ideas, helping to add value to the research, since high-quality responses are possible and could supplement facts about the subject. The decision to conduct interviews with professionals was influenced by two main considerations:

- Interviews allowed for more flexibility of responses than other methods.
- The use of interviews offered the opportunity to ask interviewees supplementary questions, which may have improved the researchers understanding of the issues and opinions raised by professionals.

Twelve interviews were conducted using professionals with an interest in Iraqi architectural identity, 9 of the 12 interviewees had more than 20 years of experience, and 3 had between 15 to 20 years of experience in architecture and urban design. Creswell (2009) suggests that between 5-25 interviews are sufficient for an interpretive study, and Rubin (2005) proposed a range of 10-15 interviews to be ample. The sample of interviewees was selected according to the role they play in city developments, as well as their extensive knowledge regarding the city's urban built environment and its recent transformation. The sample of professionals and decision makers interviewed included officials from Basra Municipality, the local government, investment, as well as other prominent architects who are considered to be influential Figures in the shaping of Basra's urban landscape. Furthermore, architectural academics who were directly influential in the direction of the city's architecture through their designs, and also indirectly through their influence on the works of the younger generation of architects practicing in the city. The interviews consisted of 11 questions; most of which were open and conducted face to face. The interview was divided into three main parts which were; the contemporary architectural style, the traditional architectural style, and the architectural identity of the city of Basra.

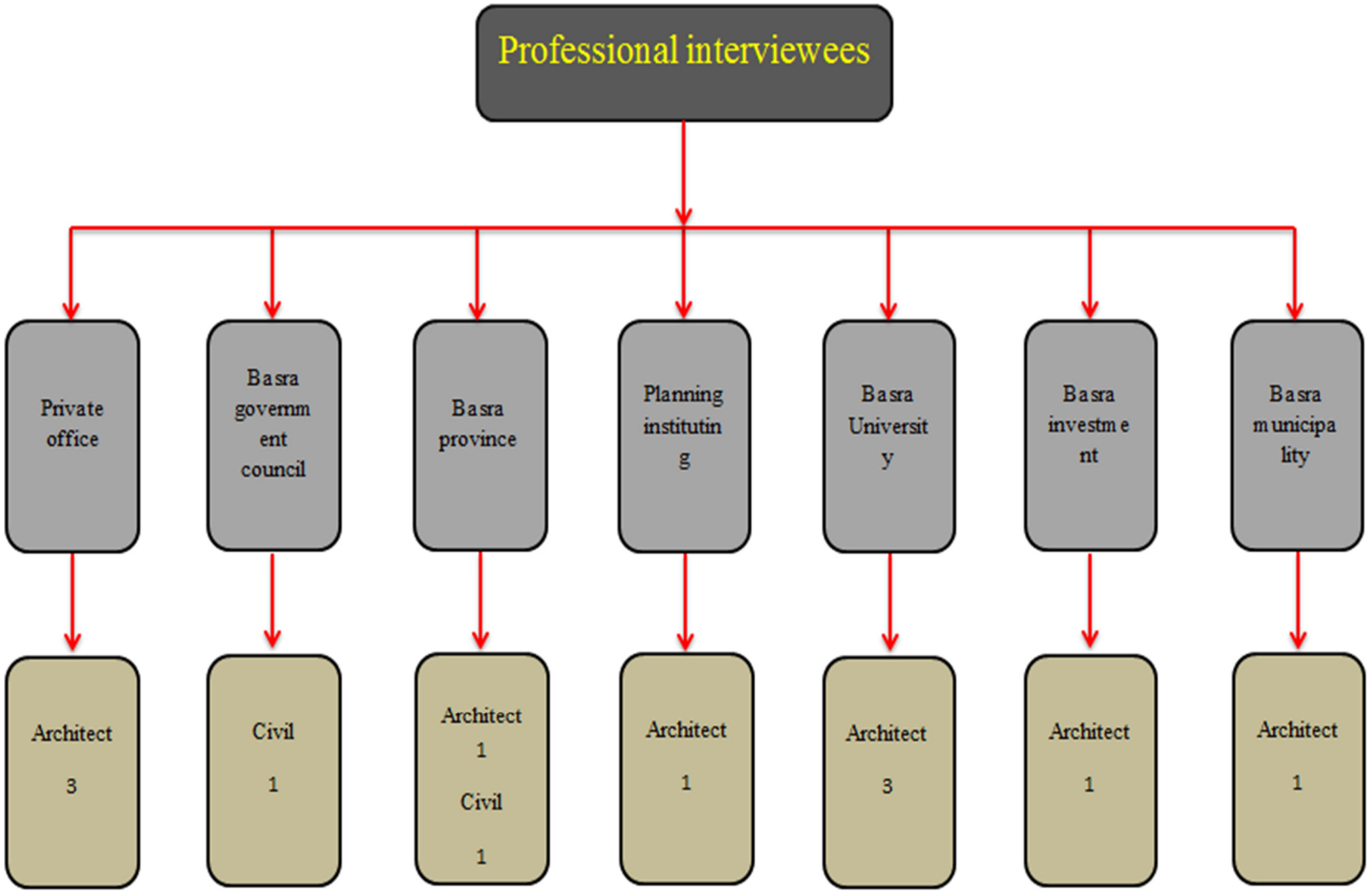


Figure 6-1: Occupation of the interview

6.2.2 Contemporary Architectural Style

6.2.2.1 Positive and Negative Aspects of Contemporary Architecture

During the interviews, the professionals were asked to classify what they perceive as the positive and negative aspects of modern architecture in Basra city. The positive features focused on technology, quick execution, and adaptation to changes and developments in the world. The interviews with professionals regarding the positive aspects of modern architecture revealed a range of opinions, which are depicted in table (6-1).

Table 6-1: The Positive Aspects of Contemporary Architectural Style

	Positive aspects of modern architecture	No. Professionals
1	The use of modern technology, especially for environmental solutions, which is much needed to deal with the city's harsh climate.	7
2	Quick execution, which is much needed in Iraq and Basra city.	6
3	The cost of the modern architectural style is lower than the traditional style, because it is based on technology and manufacturing.	5
4	Flexibility to create large spaces, perfect utilisation for the area and providing new materials.	5
5	Creates diversity, encourages creativity and provides challenges for architects. Furthermore, the architect is given an opportunity to be 'free'.	3
6	Ability to adapt to the changes and developments which are taking place in the world.	3
7	Population growth is absorbed through the use of tower buildings.	3
8	Successful style regarding building function, in terms of movement and interior design.	2

Seven out of the twelve interviewed professionals identified that the positive aspects of modern architecture included a dependence on technology, whereas six interviewees stated that the positive aspects of modern architecture included quick execution, which is currently much needed in Iraqi cities in general, and Basra particularly. Furthermore, five of the professionals specified that the modern architectural style is cheaper than the traditional style, with 5 of them stating that it provides flexibility to create large spaces, with perfect utilisation for the area. Three of the twelve interviewees mentioned that modern architecture and the materials and technologies it employs provides more freedom to architects, leading to increased diversity and creativity. Three others pointed out that modern architecture allows the absorption of population growth, and solves issues with the utilisation of tower buildings. Three of the professionals additionally explained that a positive aspect of modern architecture is the ability to adapt to the changes and developments which are occuring in the world. Only two of the interviewees acknowledged that modern architecture is a more successful style regarding building function and interior design, in addition to movement solutions.

The interview results highlight many negative aspects of the contemporary architecture style. The majority of professionals pointed out that contemporary architecture causes disfigurement of the traditional urban fabric, deforming the urban landscape of cities which previously had a distinctive character with which residents were familiar. Seven out of twelve professionals further argued that contemporary architecture ignores the identity of the city, as well as being inconsiderate and disrespectful of its history. Therefore, contemporary architectural products are often considered as being far from for city's spirit.

Six of the professionals emphasised that the contemporary architectural style is unsuitable for the climate and local environment of Basra, because it often uses materials which are unsuitable for the local climate. Additionally, five of the professionals mentioned that both the privacy of neighbourhoods and the distinctiveness of the sectors inside the city had been lost through contemporary architecture, where the creation of mental images of the city has become impossible for residents because all of the sectors now look similar. Furthermore, three of the interviewees mentioned that the contemporary architecture of Basra does not respect the human scale, which has led to inhuman architecture.

Table 6-2: The Negative Aspects of Contemporary Architecture Style

	Negative aspects of modern architecture	No. Professions
1	Metamorphosis of the urban fabric and deformation of the urban landscape of the city.	8
2	Non-respecting of identity, heritage and history of Basra, therefore contemporary architectural products are far from the city's spirit.	7
3	The spread of new materials which are unsuitable for Basra's climate and local environment.	6
4	The privacy of neighbourhoods and the distinctiveness of sectors within the city has been lost since mental images of the city are no longer available for residents because all the sectors are similar.	5
5	Non-respecting the human scale, whilst the traditional architecture was more human.	3
6	Losing the feeling of belonging to the area for residents, which has led to a loss in the sense of security, resulting in increases in crime rates, due to a reduction in feelings of responsibility for the environment in which residents live.	3
7	Global architecture has had an adverse effect on social relationships in Basra city because houses have become increasingly distant from each other, and segmentation of traditional urban fabric.	3
8	The grid line planning system for streets (the main feature of global architecture style) does not provide urban spaces. Moreover, it does not give multiple choices for residents to meet each other, or allow for social interaction.	3
9	Loss of the hierarchy of traditional urban fabric which previously relied on a social structural unit (neighbourhood).	2

Moreover, three of the professionals pointed out that a weakness in the sense of belonging to surroundings exists with modern architecture, which has resulted in a loss of the sense of security for many local residents in Basra. Unfortunately, this has led to increases in crime rates, because residents have experienced lowered responsibility towards their immediate environment. Additionally, three professionals explained that contemporary architecture is having a negative effect on social relationships in Basra, because houses are being built increasingly further apart from one another, as well as segmentation of traditional urban fabric. Three out of twelve interviewees noticed that the grid line planning system for streets and alleys, which is considered the main feature of global architecture style, does not provide enough urban spaces for social interaction, nor does it offer multiple choices for residents to meet with each other. A further negative point observed by two of the professionals relates to the hierarchy of the traditional urban fabric which relies on a social unit (neighbourhood), a feature which is absent in the contemporary architectural style. Table (6-2) outlines the views of professionals in terms of negative aspects.

In terms of the contemporary architecture in Basra city, the interviewees mentioned both? positive and negative aspects concerning this style.

The positive aspects of contemporary architectural style which were identified by interviewees involved the adoption of technology, quick execution, and low cost. Additionally, flexibility, diversity, and adaptation to changes in the world were acknowledged. Respondent R3 pointed out:

> "*Contemporary architecture is adopting new technologies, which is the main feature of the new era*."

This view was also supported by Respondent R1, confirming that there is a necessity for technology as a solution for the harsh climate present in Basra. Respondent R1 stated:

> "*The main feature of contemporary architecture is the use of technology, especially for environmental solutions, which is much needed to deal with the harsh climate that the city experiences.*"

Regarding the effects of wars and the rebuilding of the city, respondent R4 pointed out:

"The city of Basra has been mostly destroyed through previous wars, so there is a need for quick rebuilding of the city, and that could be achieved via modern architectural style, which adopts technology and manufacturing in its execution."

Moreover, many factors such as immigration and a high birth rate have led to overgrowth of the Basra city population. At the same time, Basra city is subject to expansion limitations due to the spread of oil deposits, and the preservation of archaeological areas throughout its entirety. Therefore, there is not a great deal of land available to solve the population growth matter, unless the modern style of architecture is adopted. Respondent R8 believes that:

"The population overgrowth in Basra is one of the main problems for the city, and the contemporary architectural style could offer a solution to this problem via the building of towers and other multi-story buildings."

Correspondingly, Respondent R6 highlighted that:

"Contemporary architecture has the ability to adapt to the changes and developments which are happening in the world."

The previous positive aspects of contemporary architectural style that were mentioned by interviewees indicate that future designs for Basra city should adopt this style, since it could potentially lead to the rebuilding of the city in a short space of time, whilst maintaining low costs and resulting in architectural accompaniment with the rest of the world, as well as providing appropriate environmental solutions. These positive aspects present a challenge for architects adopting contemporary features in their future designs, whilst maintaining the local identity of the city.

On the other hand, there are many negative aspects of the contemporary architectural style as mentioned by the interviewees, which affect social, environmental and planning considerations, and also the urban landscape of Basra city.

In terms of the social aspect, respondent R5 stated that:

"*The contemporary architectural style has had a negative influence on social relationships. The large areas and spacing of houses, in addition to the wide roads aren't providing enough opportunities for residents to meet with each other.*"

Figure 6-2: The Disrespect of Human Scale within the Contemporary Architecture

This is supported by respondent R12, who highlighted that:

"*The contemporary style of architecture does not care for the privacy and identity of the society, as well as not respecting its habits and values*."

Similarly, respondent R9 is of the opinion that*:*

"The contemporary style of architecture has led to the loss of the hierarchy of the traditional urban fabric which depended on the social structural unit (neighbourhood)."

Regarding environmental safety, respondent R8 pointed out that:

> "*Losing feelings of belonging to the place by residents has led to losing the sense of security, which has resulted in increases in crime rates because the residents feel little responsibility towards the environment which they live in.*"

This view was also supported by Respondent R4 who stated that:

> "*Contemporary architecture does not provide safety for residents. For example, New York City has the highest of crime rate in the whole world, because its urban landscape looks like forests of concrete towers which create non-responsibility for the environment for humans who live there*."

In terms of planning aspects, contemporary architecture has deformed the mental image of the traditional city, as respondent R3 suggests:

> *"Generally, the Arabic city has owned a unique character, and the residents felt a familiarity with this character. However, it's lost nowadays."*

Respondent R1 agreed with the opinion of Respondent R3, and explained:

> *"The privacy of neighbourhoods and the distinctiveness of the sectors in the city has been lost, and the mental image of the city is not available for residents because all the sectors have become similar*."

Consequently, a difficulty exists in discriminating between residents and strangers in the city, which has resulted in the easy penetration of strangers to neighbourhoods and a loss of privacy.

All of the above negative aspects of contemporary architectural style represent a real threat to the local architectural identity, which could lead a transformation in the identity. Therefore, there is a need for architects who deal with the contemporary style in their designs to give the matter further attention.

6.2.2.2 Evaluation of Basra's Urban Landscape during the Last Decade

The majority of professionals evaluated the Basra architectural landscape of the past ten years as bad, whilst only two individuals believed it to be satisfactory, See table (6-3).

The rationale behind the bad rating by most of the sample was varied. A number of individuals described the last decade as the worst for the architecture of Basra city, because although the city has a long history and retains a particular architectural style, the urban landscape of the city is now missing, and hybrid architectural projects of no particular type, without any clear style are taking form. In addition, the traditional architectural elements which provide a sense of belonging and familiarity to the people who live in the area are missing today, and further remaining elements are gradually reducing over time.

Table 6-3: Professionals' Opinions in Terms of the Present Urban Landscape in Basra

Opinion	Number of professionals
Satisfactory	2
Bad	10
Total	12

For example, the 300 rivers which were a distinctive feature of the city in the past have, for the most part become unkempt and defaced, appearing more recently as swamps. Moreover, slum housing which became common ten years ago has had a negative effect on the Basra urban landscape. Therefore, at present, Basra's urban landscape appears to be in a state of disarray, where no clear aim of adopting a particular style, creating a new identity, or replicating a particular type exists. There are currently a blend of visions and architectural designs within the city, and many new materials, which are strange and unfamiliar to Basra's society are being utilised.

Conversely, a number of interviewees argued that the present situation is a satisfactory temporary solution, due to the difficulty of re-creating the traditional architectural style of Basra since it has become more expensive, and there is currently a lack of professional workers. This may lead to the creation of a new architectural identity for the city.

Figure 6-3: The current situation of rivers in Basra

6.2.2.3 Suitability of Contemporary Architecture for Basra's Society

Nine out of twelve of the professionals consider contemporary architecture unsuitable for Basra's society. On the other hand, three professionals consider modern architecture as suitable. Table (6-4) illustrates the percentages of professionals who believe that modern architecture is either suitable or unsuitable for Basra's society.

Table 6-4: Professionals' Opinion in Terms of the Suitability of Contemporary Architecture

Opinion of professionals	Unsuitable	Suitable	Total
Number	9	3	12

Most professionals' reasons for selecting contemporary architecture as unsuitable are provided in table (6-6), and the reasons for suitability are shown in table (6-5).

Table 6-5: Reasons for considering Contemporary Architecture Suitable for Basra Society

1	Modern architecture is wanted now, however how to approach it depends on the degree of social awareness, knowledge of designers and operable regulations.
2	Has become common because it incurs lower costs than traditional buildings.
3	Meets modern lifestyle requirements

Table 6-6: Reasons for considering Contemporary Architecture Unsuitable for Basra's Society

1	Architecture should relate to the collective memory of residents. This cannot be achieved with global architecture, since the urban space missed for the city landscape.
2	The land surrounding houses has become larger, causing house locations to become further apart, which has led to weak social relationships.
3	According to urban standards, the sidewalk of a traditional city represents a superlative urban space with columns and portico, as well as being shadowy and providing enjoyable movement. These features are missing today because land is occupied for alternative uses.
4	Global architecture represents an essential change in building materials that are used locally. Basra city traditionally used bricks worthily and technically, whereas now alternative materials are often utilised, which is impacting on the architectural language of the city.
5	The new iron tower buildings and their technologies are not familiar to local residents, perhaps because the local residents are accustomed to, and prefer more traditional building materials.
6	Focuses on building elevations which are architecturally trite, as well as not having collective acceptance from society.
7	Fails to meet the needs of local society in terms of privacy from the street and neighbours.
8	The multi-storey buildings are not appropriate for the climate or privacy requirements.
9	Ignores Arab-Islamic identity and customs.

Meanwhile, most of the interviewees mentioned that contemporary architecture is not suitable for Basra society, because it involves strange elements and unfamiliar vocabularies in addition to its negative planning features which do not enhance the social interaction of residents. Respondent R1 indicated that:

> *"It's not suitable because the architecture should relate to the collective memory of the residents which is not achieved with a contemporary architecture style, since the urban space missed from the urban landscape of the city."*

This is supported by respondent R2 who highlighted that:

> *"According to the urban standards, the sidewalk in a traditional city represents a superlative urban space with columns, shadows, and porticos, as well as enjoyable movement. These features are currently missing because the areas are occupied for other land uses."*

On the other hand, other interviewees such as respondent R8 believed that:

> *"Although the present production of architecture in Basra city is not suitable for society, it's a temporary solution because there is no ability to revive the traditional architectural style since it is more expensive, as well as the professional workers not being available."*

Considering all of the above, the insights would suggest that the respondents are aware of the impact of the global architectural style on the local environment. Therefore, there is much need for developing standards for global architectural style to ensure it is suitable for the traditions, values, and habits of local societies. This will be achieved by filtering and analysing the global architectural products, and choosing the most appropriate for the local environment whilst avoiding direct copying.

6.2.2.4 Global Architecture Influences on Basra's Contemporary Architecture

The professionals were asked whether they believed if contemporary architecture in Basra had been influenced by western design. Most agreed that global architecture had become clearer in the urban landscape of the city, however, that no impact of a particular style exists. Therefore, the present Basra architecture appears to be popularity architecture, and is a reaction and blind imitation for a number of architectural elements, and the present urban landscape of Basra is now hybrid (with the exception of a few buildings). It is influenced by multi-architectural styles, especially for house designs. Table (6-7) sets out the features identified as evidence of western design influence.

Table 6-7: Aspects of Influence

	Aspects of influences of global architecture	No. professionals
1	New materials for construction and finishing introduced such as alucobond, stone and pantile.	10
2	External elevation elements such as using large glass windows, balconies and oblique roofs.	8
3	Outward openness for house scheme.	5
4	New types for market designs, such as shopping malls.	5
5	Housing tower system.	3
6	Grid planning system for the city.	2

The majority of professionals mentioned that fast spreading of new and unfamiliar materials used in building construction and finishing such as alucobond, stone and pantile, have become clear in the Basra landscape, while the use of more traditional, local materials representing Basra's heritage which are offered to people have become rare. Eight professionals evidenced features of external elevation such as balconies, large glass windows and oblique roofs, which are unsuitable for the local climate and privacy requirements. Five out of twelve professionals commented upon a change

which has taken place in house designs, where outward openness has become more common, and interior courtyards (with all rooms opening towards it) are reducing in popularity, providing evidence of western influence. The same number of interviewees indicated new market designs, such as malls which were previously unfamiliar in the local environment. Although they have many positive features, they are considered clear evidence of global influence on city architecture. Three professionals mentioned the new common model design for housing, which consists of multi-floor systems, despite having poor compatibility with local society, and their contributions to a deformed city skyline. Nevertheless, multi-floor systems are considered perfect solutions for population growth problems. Only two interviewed professionals pointed out the Gridlines system, another aspect of global architecture influence on the planning of Basra city. It has become the main feature of city planning; however such a system is unsuitable for Basra's society and climate.

Most of the interviewees stated that there is a clear global influence on the architectural style of Basra's present urban landscape, however, there is no dominance of a particular style. As respondent R6 pointed out:

> *"A Hybrid architectural style is present today in Basra's urban landscape, it is conflicting and inharmonious as well as motley."*

This view was supported by respondent R2, who stated that:

> "*The majority of Basra's urban landscape is now hybrid, with the exception of a few buildings. It is influenced by multi-architectural styles, especially considering housing designs."*

The interviewees defined the design features of the local architecture in Basra city which are influenced by the global architectural style as new materials, such as alucobond and stone, the openness to outward, new market types, multi-story buildings, and grid-line planning systems. Respondent R9 pointed out:

> *"The effect of the global architectural style seems clear since the use of local and traditional materials which are offered to people and show signs of heritage have become rare, and have been replaced with unfamiliar materials."*

Similarly, respondent R11 believes that:

> *"Global architecture has brought new materials which are not suitable for the environment in Basra, and the local climate."*

This view was also supported by respondent R2 who believes that:

> *"Global architecture provided an essential change for building materials that are used locally, since Basra city had used bricks worthily and technically. Whereas now, alternative materials are utilised which is impacting on the architectural language of the city."*

Figure 6-4: using Alucobond to Covering Traditional Building

On the other hand, another respondent mentioned that we should accept the global architectural style, because we live in an increasingly globalised world and the style may provide inspiration to future generations. Respondent R1 stated:

> *"We should not be scared of or refuse the global architectural style, it should be inspirational for the next generations and should support our heritage signs."*

6.2.3 Traditional Architectural Style

6.2.3.1 The Positive and Negative Aspects of Traditional Architecture

Table (6-8) sets out details regarding what the interviewed professionals considered to be the positive aspects of Basra's traditional architecture. It can be noted that the majority of professionals considered traditional architecture to create place identity, as well as providing familiarity and belonging for the residents who live inside, through an emphasis on historical values and habits. Therefore, traditional architecture could provide important connections to the past for future generations.

Table 6-8: The Positive Aspects of Traditional Architectural Style

	Positive aspects of traditional architectural style	No. Professionals
1	Offers identity, familiarity and belonging to a place.	10
2	Harmonious with climate and environmental circumstances.	9
3	Offers a high level of privacy for human, family and society.	7
4	Supports social interaction for residents through encouraging the establishment of good relationships.	6
5	Offers a safe environment in terms of crime and children's playing area.	3
6	Humane architecture, compatible with human needs.	2

Nine interviewees mentioned that Basra's traditional architecture is highly suited to the local climate and environment, where houses are close to each other and feature thick walls, winding alleys, and interior courtyards. Seven out of twelve professionals emphasised that traditional areas offered a high level of privacy for the local residents regarding homes, streets, and neighbourhood designs, by employing various architectural elements such as shanasheel, indirect entrances, and interior courtyards. In addition, the traditional architectural style encourages people to be social, and to connect with the culture, traditions and values of the city. Six professionals mentioned that the traditional architecture plays a significant role in supporting social interaction between residents through distribution, locations, and a variety of social activities such as mosques, markets, alleyways, urban spaces and interior courtyards being located inside the traditional neighbourhood. Three professionals referred to the ability of traditional architectural styles to offer a safe environment, in terms of low crime rates and children's playing areas, because of the high sense of security that the local residents feel regarding the place in which they live.

Only two of the professionals perceived the other positive aspect of the traditional architecture in terms of humanity that seemed clear in unity for design, where the streets and houses are similar in design style and materials. That helped to create a cohesive society where is neither division into castes nor social differences which might reflect on resident psychologically, in addition to respecting human scale in terms of the design of public buildings and urban spaces. Moreover, the traditional architecture is a Sustainable and compatible with human needs.

Table (6-9) offers responses on what professionals regarded as the negative aspects of traditional architecture.

Most of the professionals referred to the inability of traditional architecture to deal with modern day requirements, because its flexibility is limited, and therefore it has not adapted to the changes that have happened in the world, such as car entry. Seven interviewees pointed out that the traditional materials used in local architecture, such as clay and wood are not sufficiently strong, especially when considering the climate. Therefore, traditional buildings need regular maintenance to ensure they remain fit for human habitation over time. Four of twelve professionals mentioned that changes in lifestyles should reflect changes in architecture, and therefore many of the elements of

traditional architecture have become unsuitable for modern life, because they were previously designed for a particular and often outdated purpose. Four others highlighted the wasting of land as a negative point of the traditional architectural style in terms of thick walls and interior courtyards, especially when considering the increasing price of land. Therefore, they believe that traditional architecture is not an ideal use of land in Basra.

Table 6-9: The Negative Aspects of the Traditional Architecture Style

	Negative aspects of traditional architecture	No. Professionals
1	Failed to deal with the new as well as not having the flexibility to adapt to change.	9
2	The materials used in traditional architecture such as clay and wood do not have continuance and never have the ability to last for the long term.	7
3	Some of the features of traditional architecture have become inappropriate with no, or limited logical reasons to continue them, such as the interior courtyard and the indirect entrance.	4
4	Wasting of land, due to features such as thick walls and interior courtyards, meaning the land is not put to ideal use.	4
5	Failed to absorb the population overgrowth that has occurred in the city, because of the limitation of its function, and expansion	3
6	Lengthy building times are required. Moreover, the number of handicraftsmen is dropping and is unavailable at the present time.	3
7	The difficulty of execution of infrastructure projects because of the winding alleys in the traditional areas.	2

Three of the professionals stated that the traditional architectural style has failed to absorb the population growth that has occurred in the city within the past few decades,

caused by the limitations of the traditional style in terms of functionality and expansion. The same number of professionals mentioned that the period of implementation of the traditional style is very lengthy, because it depends on professional workers, which are becoming increasingly difficult to find, as their numbers are dwindling. Moreover, Basra city was destroyed during the wars, and therefore rapid rebuilding became necessary, which could not have been achieved through the use of the traditional architectural style. Only two out of twelve individuals interviewed highlighted the difficulty to pass through infrastructure due to winding alleys of urban fabric in the traditional architectural style of the city.

Figure 6-5: Similarity, Unity, and Humanity of Traditional Architecture in Basra City

Regarding traditional architecture, the interviewees clarified the key positive features of the architectural style. In terms of the social aspect, they mentioned that it provides identity, familiarity, and a sense of belonging to residents. At this point, respondent R4 declared that*:*

> *"It has created the places identity, via providing a psychological sense for the people who live here."*

Respondent R2 shared this view by clarifying that:

"The traditional architectural style connects people with traditions and social values, and has a particular style which is very sensitive to local social, environmental and cultural features. Moreover, this style embodies the resident's culture; and in addition, it was a supporter for continuity of the local architectural language which included bricks, wood and ornamentations."

Similarly, Respondent R12 pointed out*:*

"Traditional architectural style consolidates the historical values and habits of residents; therefore, it's connecting the next generations with the past."

Additionally, the professionals mentioned it offered a high level of privacy for individuals, families, and society. As respondent R10 pointed out;

"*Traditional style of architecture provides a high degree of privacy for a person, and also for families and society, where it used a shanasheel, indirect entrance, and an interior courtyard in the design of a traditional house.*"

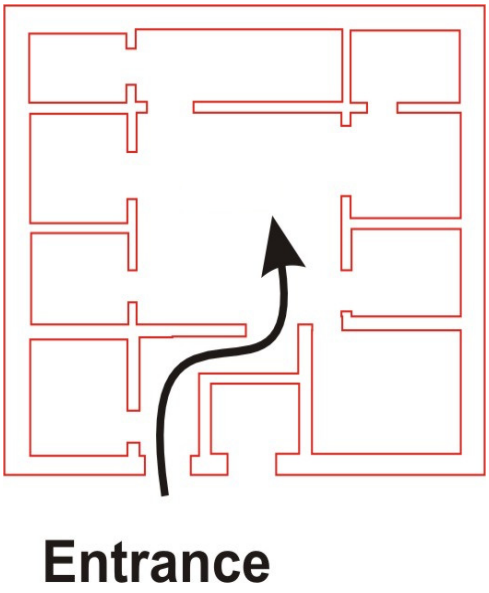


Figure 6-6: The indirect entrance in traditional houses

Another social aspect was mentioned by respondent R4 who highlighted that:

"The traditional architecture creates a safe environment, because of the high level of security sense for the residents who live there, and because they have strong social ties."

The traditional style of architecture enhances social interaction, as Respondent R11 declared:

> *"The traditional architectural style has supported the social interaction between residents, which was very strong in the traditional neighbourhood."*

Similarly, Respondent R9 pointed out:

> *"The urban spaces in the traditional style played a significant role regarding supporting social interaction, such as a courtyard house, alleys of neighbourhoods, and public spaces in the city."*

In terms of environmental aspects, most of the interviewees declared that traditional architectural style has dealt with the environment as a significant issue, as Respondent R10 states:

> *"The consideration for climate aspects was on a high level in the traditional architectural style, where houses were close to each other and featured thick walls and winding alleys, in addition to the interior courtyard of the houses."*

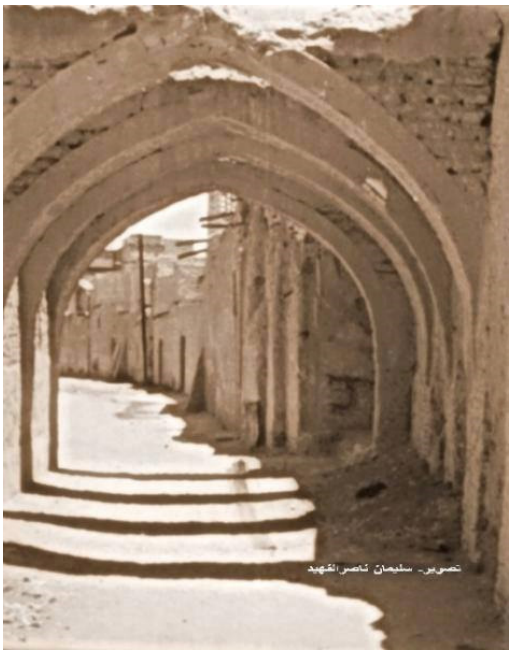


Figure 6-7: The Traditional Winding Alley in Basra –Climate consideration

According to planning aspects Respondent R9 highlighted that:

> *"The distribution, locations and variety of the activities in the traditional neighbourhood planning play a significant role in building the memory of the residents, such as the mosque and markets."*

Respondent R4 added that:

> *"The Traditional architectural style provides visual richness and vitality of the urban landscape of the city, in addition to respecting the human scale."*

Generally, the positive aspects of traditional architectural style that are mentioned above indicate that to maintain an architectural identity for the city, the future designs should involve these features. Also, traditional architecture should be the significant reference throughout the modernising and regeneration of the city.

On the other hand, there is a number of negative aspects for the traditional architectural style which have impacted the continuity of this style, such as its failure to deal with the new, and its lack of flexibility in adapting to change, as Respondent R2 stated:

> "*Unfortunately, it didn't adapt to the changes that happened in the world, such as car entry, because it had been designed according to pedestrians. S*imilarly, Respondent R5 declared that *"traditional architecture failed to deal with the new and did not have the flexibility to move forward with changes which have happened in the modern day."*

The materials utilised were considered one of the negative aspects of traditional architecture, as Respondent R7 pointed out:

> "*The materials used in traditional architecture such as clay and wood are not providing continuity and never have the ability to stay for the long term."*

Other respondents, such as R9 highlighted that:

> *"The Technology that is used in contemporary architecture today led to cancellation of many of the traditional elements."*

Another respondent, R11 supported this view and stated:

> *"Because of the change in lifestyles, some traditional elements and vocabularies have unsuitable now, so there are no logical*

reasons to continue with them, such as the interior courtyard and the indirect entrance."

In addition, Respondent R8 strongly believes:

"The traditional style became unsuitable for the new lifestyle, and new requirements of life regarding the area of space and the furniture and so on."

Respondent R5 emphasised that:

"The traditional style of architecture does not ideally use land, since it features thick walls and interior courtyards which are leading to wasting the land area, especially when the cost of land has become more expensive, particularly in the city centre areas*."*

Regarding the population growth problem in Basra city, some of the interviewees considered that the traditional style failed to solve the problem, as Respondent R4 declared:

"*Traditional designs have failed to absorb the population overgrowth that occurred in the city because of the limitation of its function and the limits of its expansion."*

Others clarified that the traditional architectural style needs a long time to construct, at this point, Respondent R7 stated:

"*The traditional architecture needs a long period to build up because it depends on craftsmen and since the number of handicraftsmen is dropping, they have become not available in the present time."*

In terms of the planning aspect, a number of interviewees mentioned that the traditional style has become an obstructive issue with development projects, as Respondent R12 believes:

"In the traditional areas, we are facing a real problem for infrastructure projects because it is challenging to pass through the winding alleys."

All of the negative aspects that are mentioned above have led to the disaffection of society with the traditional style, resulting in a transformation of architecture towards importing alien styles that have threatened the identity of the city. The traditional architecture, as the interviewees mentioned, was a sustainable architecture that was considerate of and caring towards the social, environmental, and cultural aspects of local society. Nevertheless, there are a number of negative features of this style.

6.2.4 Architectural Identity of Basra City:

6.2.4.1 Influential Factors on Formation of the Traditional Identity

Opinions were sought about factors that formed a traditional architectural identity for Basra city. Interviewee's responses were that all the factors mentioned in the interview had formed the traditional architectural identity for Basra city. However, they provided varying evaluations considering which factor had the most impact.

Table 6-10: The Influential Factors on Formation of Identity

	Factor	No. Professionals
1	Socio-culture: has influenced the architectural identity of the city in terms of privacy for residents against outsiders and social interaction.	10
2	Climate: reflected in the winding form of alleys, relation with the rivers, interior courtyards, solid external walls, and house alignment.	9
3	Economy factor: represented through wealthy family homes, the houses land dimensions, finishing materials and interior design.	5
4	Religion: The aspects of influence, privacy, the orientation of streets and alleys towards Mosque and similarity in houses rising.	5
5	Political factor: represented in landmarks of the city, the master plan in addition to laws of the building and the occupation period style.	2

The majority of interviewees identified the socio-cultural factor as a greater influence on the identity formation process in terms of providing privacy for society and social interaction. Privacy is represented by solid external walls, shanasheel, and the alignment of houses in neighbourhoods, interior courtyards, indirect entrances to houses, and the hierarchy planning system. Nine of twelve professionals mentioned that the climate had an effect upon architectural identity regarding the choice of building materials, winding alleys, relation with the rivers, interior courtyards of houses, thick solid external walls, and the juxtaposition of houses.

Five of the professionals stated that economic factors have also affected the identity in terms of the type of materials used, and the area of houses. Wealthy individuals have attempted to reflect their characters in the design of their homes, and the public have then tried to imitate the architectural style of these houses according to their income, especially considering finishing materials and interior design.

Five other professionals declared that religion impacts upon identity formation for Basra city in terms of the privacy of neighbourhoods. For example, in the past the residential areas had been divided according to a religious criterion, and included Muslim areas, Christian areas, Jewish areas, and so on.

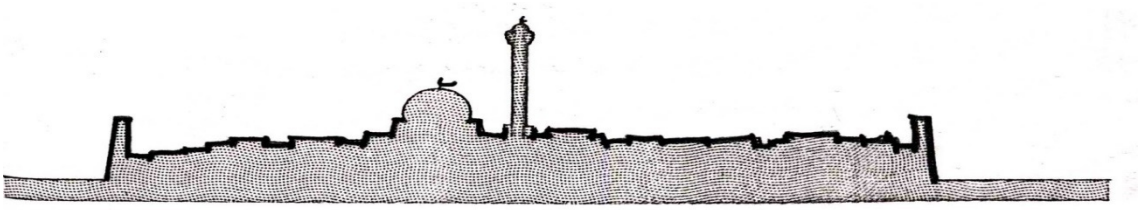


Figure 6-8: Religious Dominance in the Arabic Islamic City Landscape

In addition to the important role that mosques played in the planning of the city regarding the direction of streets and alleys, and respecting the height of mosques in the sky line of the city, other religious buildings such as shrines, which were used for varying activities represent a landmark in the image of the city. Two professionals mentioned that political factors had participated in the formation of architectural identity for Basra in terms of foreign occupation periods, which have influenced the local architectural identity through a new style of buildings and landmarks built to immortalise their power. The political role also features in building rules and laws enforced by the government, regarding master-plan orientation or land use policy.

All the interviewees emphasised that Basra city has a unique and an original architectural identity which distinguishes it from other cities, which formed according to numerous factors. There was an agreement between all interviewees that factors such as social, environmental, political, economic, cultural, and historical had participated in forming the identity of the city, however, the impact was a dissimilar for each, as Respondent R1 highlighted:

> "*All the factors collaborated for the identity formation process, however, each factor had a particular role. It is not possible to deal with one factor separately*."

The majority of interviewees believed that social factor was more influential, in addition to environmental factors. Respondent R2 declared:

> "*Social and climate factors played the main role in the identity formation process*."

Regarding the impact of social factors in traditional architecture, Respondent R1 mentioned:

> "*The social factor is represented by solid external walls, shanasheel, attached houses, interior courtyards, the indirect entrance, and the hierarchy planning system."*

Whilst Respondent R6 stated:

> *"The social factor has seemed clear as society needs to meet religious and cultural needs. Therefore, they need a variety of buildings designed for these activities, according to their function."*

Most of the interviewees identified the environment as a second influential factor, as Respondent R5 stated;

> "*The environmental factor has been reflected in the winding street forms, connecting with rivers, interior courtyards, solid external*

walls, and attached houses, which had a significant effect on resident behaviour."

The third factor classified by interviewees was the economic factor. Respondent R4 clarified;

"*The economic factor is represented by rich people when they build their houses to reflect their characters, and then the public tried to imitate these house styles according to their individual incomes."*

Figure 6-9: The Interior Courtyard in Traditional House in Basra City

However, according to Respondent R7:

"Economic factors are clear in the finishing materials and interior design of houses, but it was not clear in the structure of the architecture."

Regarding the religious factor, the Respondent R7 implied:

"Religion has played an important role, since the Muslim society has particular traditions and values, which are reflected clearly in the privacy of the house and relationships with neighbours. That led to creation of the interior courtyard, indirect entrance, and solid walls."

Figure 6-10: Dominance of Religious Elements in Basra City

This view was supported by Respondent R11 who claimed:

> *"Religious factors have affected the city planning of Basra, like other Islamic cities, where the mosque location is in the centre of the city surrounded by the markets and public buildings, and then the residential areas. The influence is seen on the street and alley designs, in addition to respect for the mosques height in the skyline of the city."*

Similarly, Respondent R10 clarified the significance of religious considerations in the planning of the city, where he declared that:

> *"Regarding planning of the city, the residential areas of Basra have divided, at the beginning, according to religious criteria, such as the Muslim area, Christian area, Jewish area, and so on".*

The fifth factor that participated in the identity formation process of the city, as highlighted by interviewees was the political factor. Respondent R3 pointed out:

> "*Because the political factor forms the culture in general, then the culture forms the identity. So, politics played a significant role in the Iraqi identity formation, both directly and indirectly."*

This view is supported by Respondent R8 who believes that:

"The political factor seems clear when selecting particular historical images in specific periods to represent the Iraqi identity, when according to political ideologies, these periods were representative of strength periods. This has led to the borrowing and adopting of architectural features from these historical periods to form new identities of the cities."

Some of the interviewees mentioned culture as a factor which led to the formation the identity of the city. Respondent R10 explained that;

"The geographical location of Basra city as a border city with three countries, as well as the ports in the city, has led to being in touch with other societies and cultures, which has had a significant impact on the formation of Basra's cultural identity, which generated the architectural identity of the city."

6.2.4.2 Suitability of the New Materials to Maintain the City's Architectural Identity

Responses to the question as to whether building materials currently used in Basra city are suitable for maintaining the city's identity, are shown in Table (6-11).

Table 6-11: Suitability of New Materials to maintain Architectural Identity

Opinion	No. professionals	Reasons
Suitable	3	- Longer life, stronger than local materials. - Good quality and perspective. - Suitable for multi-storey buildings.
Unsuitable	9	- Unsuitable for the climate. - Far from local collective memory because they are unfamiliar and strange. - Creates a new architectural language.

According to the above table, most of the professionals considered building materials used in contemporary architecture as failing to maintain traditional architectural identity. The reason behind this was that they are unfamiliar to the local environment,

examples of this being Alucobond and pantile. Conversely, three professionals considered that new materials might maintain architectural identity if used in a certain way, because they are stronger, and could remain intact for longer than local traditional materials, such as stone and marble.

Most of the interviewees believed that the new materials are not suitable to maintain the architectural identity of the city, because they perceive them as unfamiliar with local society, and far from collective memory. Respondent R1 advocates that:

> "*The entry of the new materials into local markets, give a negative and dangerous indicator because it's happening without any controls and monitoring. Moreover, there is neither enough awareness nor official orientation to protect the public sense which will have bad effects on city identity in the future".*

Respondent R1 justified his argument by stating that:

> *"The local society has been dazzled by the new materials because local people do not have knowledge of their backgrounds. Therefore, these materials, in their view, have become more important than architectural form, elements and the relationships between them."*

This view was also supported by Respondent R3 who stated:

> *"The materials now enter the market as a trading commodity according to the trader's decision, without any consideration to the privacy of the city, as well as no consultation with architects or engineers. However, in the past materials have entered according to scientific studies and laws from government organisations."*

Figure 6-11: Traditional School

Figure 6-12: Modern School

Respondent R3 gave an example, as a clarification:

> *"For example, in the seventh decade of the last century, new materials entered into the Iraqi market, and the local society accepted these materials and an adoption process took place to ensure the materials were suitable for the local environment. They then became a part of local identity when they got a collective agreement from society."*

Similarly, Respondent R7 strongly believes that:

> *"New materials do not encourage maintenance of the traditional architectural identity because of their strangeness and non-familiarity with the local environment."*

This view was supported by Respondent R9, who highlighted that:

> *"The new materials will not help to maintain the architectural identity of the city, and will also fail to create a new identity."*

However, Respondent R5 believes:

> *"The new materials could support in maintaining the local architectural identity, if society has a successful procedure to use them in a right way, that's because the new materials have longer continuity than traditional ones."*

Respondent R8 similarly believes:

> "*The ability to interpret the new materials for local people to be close to the local environment may help to adopt them into their collective memory, and they then could be used to maintain the local architectural identity."*

6.2.5 The Future of Basra's Architectural Identity

During the interviews, interviewees were asked to give their views and recommendations of how to effectively maintain identity in the city's future architecture. The interview findings are collectively listed below in bullet points.

- Develop architectural standards for the private sector to confirm that the future urban landscape will be more harmonious, where houses and private buildings are not randomly built.
- Re-produce traditional architectural elements and vocabularies, through new styles, using new technologies, as well as new materials via regeneration.
- Feature metaphors of traditional forms and elements in the design of new public buildings with the use of new technology which will help to remain in the collective memory of the society.
- Preserve an architectural style for each section of the city, whether a traditional or more modern section.
- Inclusion of the heritage elements and architectural identity features in the new

investment projects in the city.

- Revival of the traditional areas in the old city via encouraging people to live in the locality, as well as maintaining the traditional buildings.
- The attempts to retain an entirely traditional architectural identity will never be achieved because the world is changing and developing rapidly, so the city should adapt according to these changes.
- Development of the legislations and laws which could ensure that architectural identity and local heritage is maintained.
- Follow Chadirji or Makiya approaches to maintain the architectural identity in Iraq. Chadirji dismantled the external layer of buildings, drawing inspiration from heritage by taking into account changing features, whereas Makiya restored traditional elements through copying them.
- Residents should not be scared of, or refuse to adopt the global architectural style, and it should be used as inspiration for future generations, ideally supported with heritage signs.

Regarding the future of the city's identity, the interviewees suggested a set of recommendations that they believe could help to maintain the architectural identity of Basra city in the future. According to Respondent R1, the first step should include development of laws and legislations to protect the local identity:

> *"There is a need to develop the legislations and laws, as well as to develop architectural standards for the private sector to confirm that the future urban landscape will be more harmonious and that houses and private buildings are not buildt randomly."*

Respondent R2 mentioned the necessity to revive social memories:

> *"Preservation of the diversity of architectural styles of each sector within the city whether it is a traditional or modern style is needed."*

One suggestion was to follow the Chadirji or Makiya approaches to maintaining the architectural identity in Iraq; this can be seen within suggestions by Respondent R3*:*

"Basra would benefit from Chadirji and Makiya attempts to revive the Iraqi architectural identity during the seventh decade of the last century. Chadirji removed the external elevation of buildings via drawing inspiration from the heritage, taking into account changing elevation features, while Makiya restored the traditional elements through copying them via preservation."

According to the recommendations of Respondent R11:

"There is a necessity to revive the traditional areas in the old city via encouraging people to live in them, as well as maintain the traditional buildings." The respondent R12 supported the recommendation by giving a successful example of the revival of a traditional area in Tunisia.

The interviewees stressed the importance of heritage as references for future development in the city. Respondent R10 recommended:

"There is a need to metaphor the traditional forms and elements in the designing of new public buildings, as well as using new technology for these treatments, that will help to remain in the collective memory of the society."

This view was also supported by Respondent R6, who stated there is a need to:

"Re-produce the traditional architectural elements and expressions, via a modern style, using new technology, and new materials."

Similarly, the interviewees emphasised the adoption of heritage signs and elements in the investment projects of the city. Respondent R9 recommended that:

"There is a need to include the heritage and identity features in the new investment projects of the city, to be vivid in the memory of society, and in addition, provide continuity for the next generation."

Because the world is changing dramatically, flexibility has become an important feature for success as the interviewees have mentioned. Respondent R5 clearly admitted that:

> *"The attempts to completely defend traditional architectural identity will never be the right approach. Therefore, there is a need for flexibility in terms of the architecture of the future, since the reality is that the world is changing dramatically, so these changes are essential."*

6.2.5.1 Reasons for Deterioration of the Architectural Identity of Basra City

The responses of the interviewees regarding the factors that led to the deterioration of Basra's architectural identity are shown in table (6-12).

Table 6-12: Factors that Led to Deterioration Basra's Architectural Identity

	Factor	No. Professionals
1	Government policy	10
2	Awareness of society	8
3	Political factor	7
4	Economic factor	7
5	New building materials	5
6	Architectural academic institutes	3

The majority of the interviewed professionals identified the lack of government rules and legislation as the main reason for losing local architectural identity for Basra city, where the development processes of the city occur independently and are out of control. Therefore, there is no technical organisation to monitor public decorum or to be responsible for identity issues. Furthermore, there is neither supervision nor a clear future vision for the city's urban landscape. Moreover, although there were many laws and rules to organise the city's building processes in the past, no serious enforcement of these rules exists during city development processes today.

Furthermore, the rules which already existed became an impediment to city development, because they have not been updated recently. In addition, the government has not developed suitable rules for investment projects or clear rules and guidelines for

companies to encourage replication and reflection of the heritage elements in their projects. The uncharted and uncontrolled expansion of the city which took place in an attempt to absorb the population growth and its effects on the city's architecture and identity, as well as the continuous immigration to the city from other cities, without developing laws or rules to restrict it.

Eight professionals declared that the level of societal awareness impacts identity continuation, where the basic principles of architectural identity are excluded from the collective memory of society. Society feels mentally confused when it is not able to have a sense of traditional elements which have originality and a link with heritage. Therefore, society feels that historical influence is not active. Seven out of twelve interviewees mentioned political factors as a reason for the deterioration of the city's identity because of the three previous wars and their effects on the city's architecture. The unstable security situation in Iraq over the last period has led to the government giving priority to security aspects, and providing only the most basic needs for citizens, such as infrastructure projects, which were mostly destroyed during the war, rather than caring for identity and architectural landscapes of the city.

Seven of the professionals stated that the economy has played a significant role in the deterioration of Basra's architectural identity. The economic blockade that was placed on Iraq between 1990 and 2003 had a negative effect on the architectural identity of the city, where no maintenance processes for the heritage buildings were in place, which led to destruction of most of these buildings. After 2003, the increase in disposable income for people who live in the city led luxuries within society, and wide openness to the world in all aspects. In addition, investment poured into the city, which had a clear effect on the city's urban landscape. Moreover, at present, both the wealth and also the majority of strategically located land in the city of Basra are occupied by individuals who are neither qualified nor efficiently in regard to tradition and heritage, as well as not interested in identity's issue, which has led to negative effects on the current architecture of the city, and has possibly affected its future, because construction is undertaken according to individual ideologies, which may contrast with the heritage and identity of the city.

Five of the professionals referred to the new building materials and their negative effects on city architectural identity, since these materials are not only being used for contemporary buildings, but also for covering the traditional and historical buildings,

which has led to distortion of the buildings, as well as effacement of their architectural identity features. Examples of coverings include the widespread use of Alucobond for cladding purposes. On the other hand, the traditional local materials have become unavailable and expensive. Only two professionals highlighted the role of architectural academic learning, which failed to establish interest in the concept of identity and heritage with students of architecture in Basra, which will reflect on designs and products in the future.

The interviewees identified six main causes of identity deterioration. However, they mentioned that these reasons had a different effect on the identity issue. The main reasons that led to deterioration and defacement of the local architectural identity of Basra city as identified by the interviewees are; governmental policy, awareness of society, political factors, economic factors, building materials, and architectural academic learning.

- **Government Policy**

In terms of the policy of the local government, the interviewees mentioned a lack of governmental rules and legislation were to blame for the deterioration architectural identity, as Respondent R8 stated:

> *"There are no laws or legislations to control the development process of the city, so the building projects are occurring in an independent way and are out of hand."*

This view was also supported by Respondent R9 who stated:

> *"Although there were many laws and rules to organise city building processes in the past, there is no serious enforcement of these rules through city development processes today."*

Similarly, Respondent R7 added that:

> *"The rules which already exist have become an impediment to city development because they are out of date."*

Respondent R10 highlighted the need for a governmental organisation to oversee the identity issue, as he pointed out that:

"No technical organisation exists to monitor public decorum. Therefore, there is neither supervision, nor a future vision for the city's urban landscape."

- **Awareness of Society**

Other interviewees emphasised the societal awareness impact on the continuation of architectural identity. Respondent R1 believes that:

"The lack of awareness leads to forgetting the basic principles of architectural identity from the collective memory of society."

Respondent R4 is satisfied with this view, and agrees that:

"The society feels confused when it loses the ability to have a sense for traditional elements, which have originality as well as a link with heritage."

Respondent R6 strongly believes that:

"Because of the wars and isolation that took place in Iraqi society in general, and disconnection with the whole world for more than thirty years, the local society believes that it is lagging behind others, and therefore is trying to catch up and provide security."

Similarly, Respondent R3 declared that:

"After the changes that happened in 2003, there was a real crisis in all aspects of Iraqi culture, and since architecture is a significant part of culture, the present architectural product is a result of this crisis."

- **Political Factor**

The third reason that the interviewees presented was the political factor, and most of them mentioned the three wars that have taken place in Iraq over the last three decades, as Respondent R5 pointed out:

> "*The previous wars and their negative effects on the city's architecture were a significant reason for the loss in identity because they destroyed most of the heritage buildings in the city.*"

This view was also supported by Respondent R10 who stated:

> *"The government have not paid enough interest in the architectural identity of the city. The priority of the government to provide the basic needs for citizens such as infrastructure projects which were mostly destroyed during the war has led to them not caring for the identity and architectural landscape of the city."*

Respondent R7 similarly admitted that:

> *"The unstable security situation in Iraq during the last period has led to the government giving priority to this issue, rather than focusing on architectural identity and the city's urban landscape."*

- **Economical Factor**

In terms of economical factors, which was classified by the interviewees as the fourth reason that led to deterioration of the architectural identity of Basra. The interviewees mentioned the UN blockade against Iraq which was in place at the end of the last century had a negative effect on the city's identity, as Respondent R8 admitted:

> "*The economic blockade of the UN that was forced on Iraq between 1990 and 2003 had a negative effect on the city's architectural identity, where there were no maintenance processes in place for the heritage buildings which led to destruction of most of these buildings.*"

After 2003, economic factors also aided the loss of the city's identity, as Respondent R2 stated:

> "… *luxury of society and the wide openness to the world in all aspects, which happened after 2003, in addition to investment into the city, moreover the increase in disposable income for*

people who live in the city. All these caused disorientations of the city's urban landscape, and encouraged the loss of the architectural identity of the city."

Some of the interviewees raised a concern regarding the land owners, believing they are responsible for the dramatic changes that have happened recently. A new wealthy individual's category emerged, who are not qualified. Respondent R10 highlighted that:

"Most of the owners of share capital in the present time are neither qualified nor efficient, so their buildings have had bad effects on the current architecture of the city and also for its future. This is because they occupy a large portion of significant places in the city, and develop structures according to their visions, which in many cases contrast the heritage and identity of the city."

- **Building Materials**

Another reason mentioned by the interviewees relates to modern building materials, which are commonly used today. Since they are not familiar with the local environment, they negatively affect the identity of the city. Respondent R1 pointed out:

"*Many sorts of new materials entered into the city and became common, such as Alucobond, which has technological indications, more than symbolic indications, as well as looking strange and unfamiliar to the local society*."

Likewise, quoting Respondent R5:

"The new materials that are recently being used are not suitable for the climate, and do not consider the local environment of the city."

The effect of these materials on the identity of the city was clarified by Respondent R4, who declared that:

"The problem is that the new unfamiliar materials are not just being used for finishing the modern buildings, but they are also negatively used for covering the traditional and historical buildings that have heritage values, which has led to distortion of these buildings, as well as effacement of the architectural identity features."

Another bold statement made by Respondent R3 was:

"Using new materials as finishes for traditional and modern buildings will lead to creating a new identity for the city because it will hide the original features of its local identity."

- **Architectural Academic Institutes**

Some of the interviewees have raised the role of architectural learning as a cause which supports the loss of the architectural identity of Basra. Respondent R4 believed:

"The academic institutes of architectural learning in Basra have never given enough interest to identity issues, and they have also never tried to establish the identity concept in the student's minds, which should be the bedrock for the syllabus."

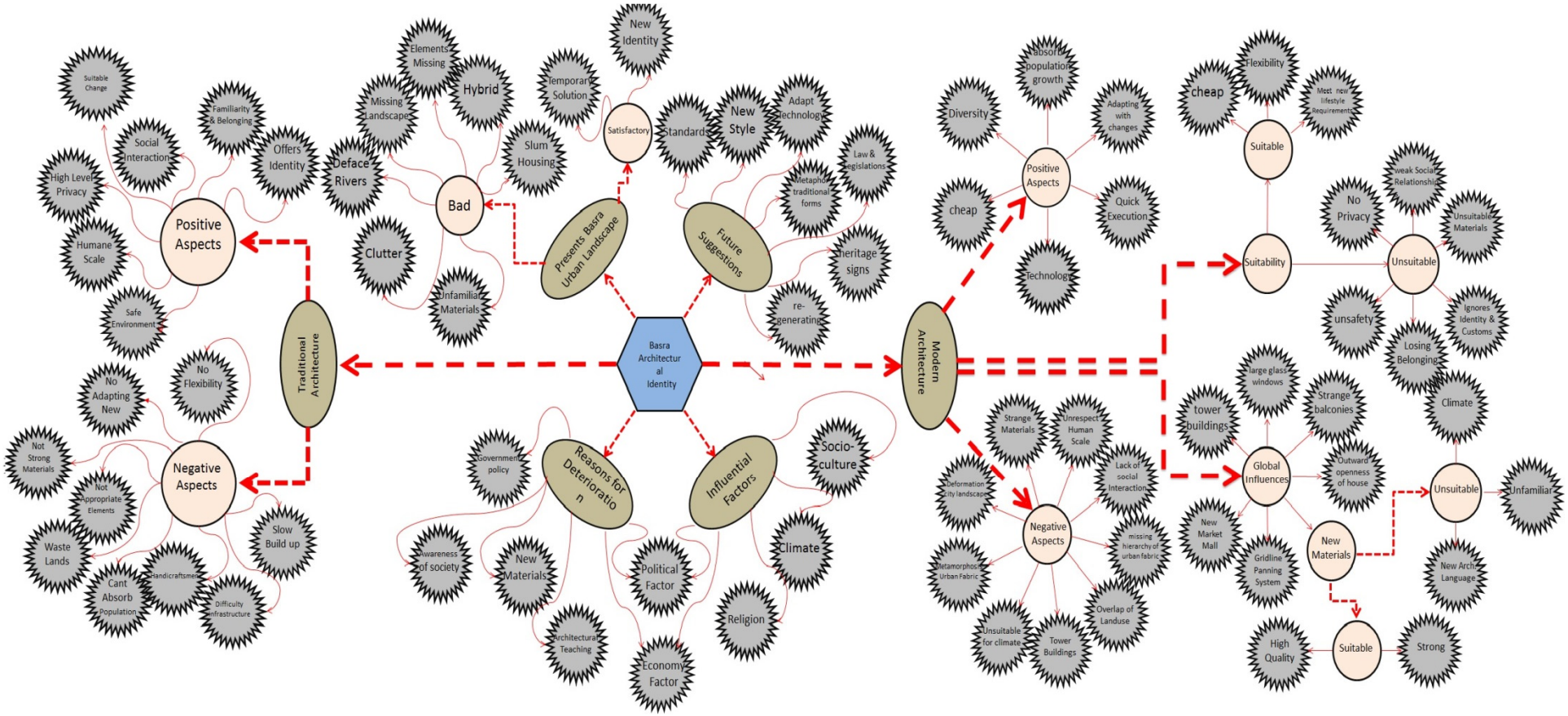


Figure 6-13: The Cognitive Mapping

6.3 Quantitative Data Analysis

6.3.1 Introduction

As Sekaran (2003) questionnaire is a pre-formulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. Although questionnaires may be used as the only data collection method, it may be better to link them with other methods in a multiple methods research design.

In this research questionnaires, will be deployed as a supporting tool to provide additional quantitative data. The purpose of the questionnaire in this research is to assist the researcher in obtaining the general opinion of the residents in the three areas of Basra case study about the current situation of city architectural identity and how can maintaining it, as well as the using of questionnaire, enables the researcher to obtain information from a larger group of respondents within a limited time frame.

Table 6-13: The Response of Questionnaire

Area Category	Questionnaire Distributed	Completed Questionnaire Received	Questionnaire Not Completed	Response Rate
Residential neighbourhood	300	119	181	39.6%

Table 6-14: The responses of the questionnaire survey

Neighbourhood	Old Basra	Ashar	Jazair	Total
Respondents	39	33	47	119
Percentage	33%	28%	39%	100%

The questionnaire is divided into six parts:

- General personal information
- Traditional architectural identity
- Modern architectural identity
- Comparison between traditional and modern identity
- Main factors influenced identity
- Future for Basra architectural identity

6.3.2 Part One: General Personal Information

6.3.2.1 Gender and Age:

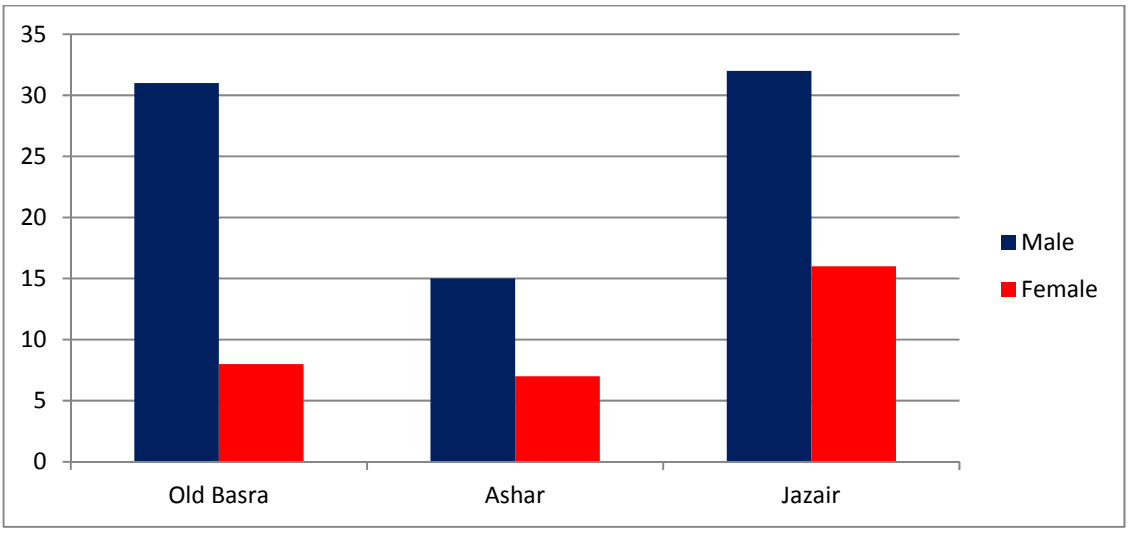


Figure 6-14: The Gender of Respondents

As can be observed from Figure 6-14, 72 % of the people who responded were men, 28 % were women. The predominant age group of them was over 30 (55%). The youngest age group, those between 20-30 years old was 28% and the smallest element in sample i. e. those aged over 50 years was a mere 17% Figure 6-15.

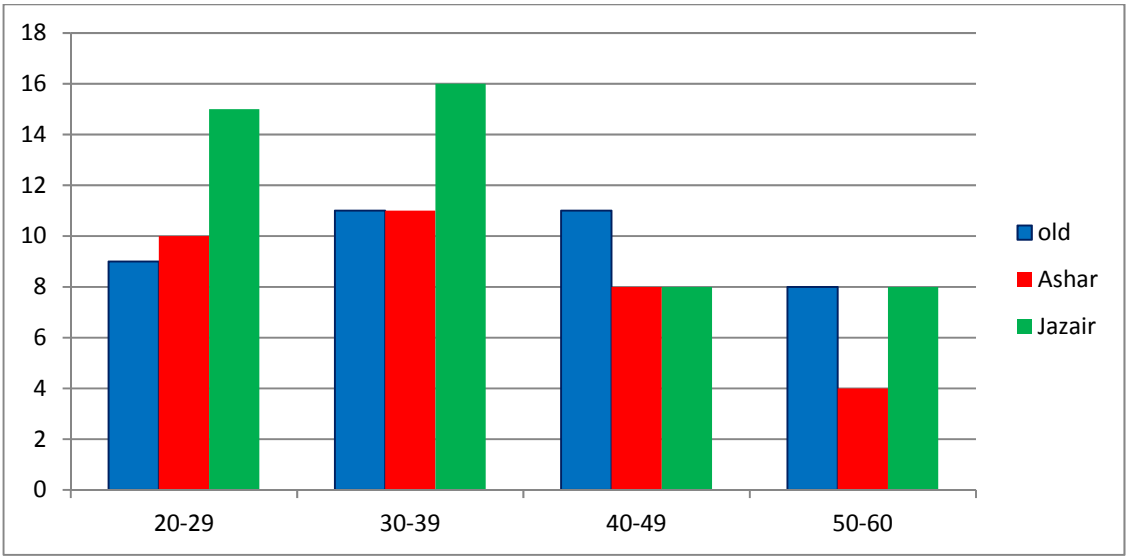


Figure 6-15: Age Groups of Respondents

6.3.2.2 Education Level:

The level of education is also considered to be an important factor that may influence respondents' opinions towards architectural identity and comparisons. According to Figure 6-16, 48 % of the respondents had a university degree, 19 % were postgraduate, 13 % secondary level, 15 % primary level.

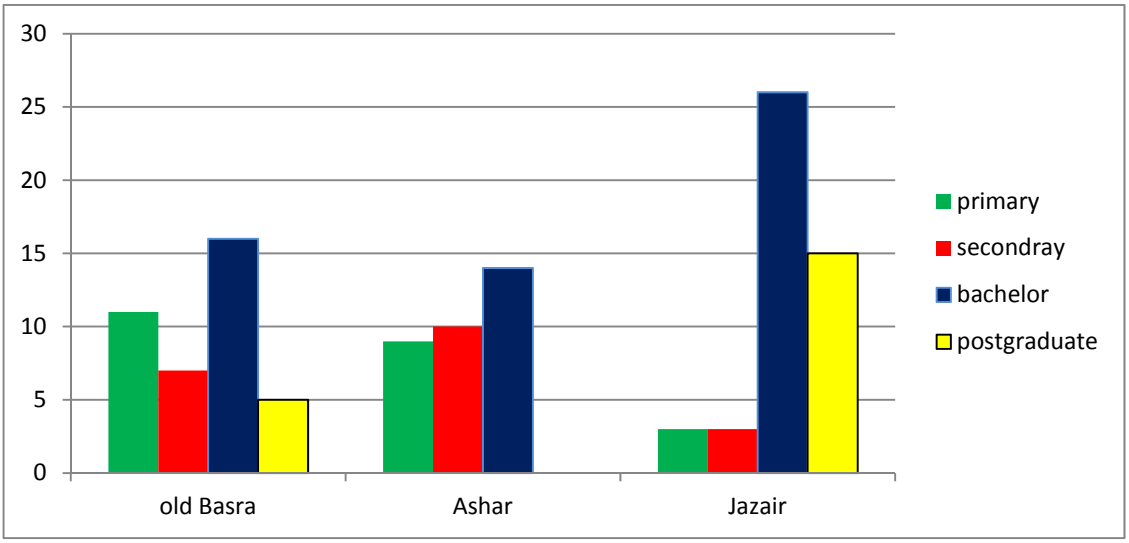


Figure 6-16: Education Level of Respondents

There were wide differences in the educational level of the respondents, however, most of them have achieved a good level of education, which gives them the ability to answer the questionnaire and further represents the more affluent sector of opinion.

6.3.2.3 Period of Living in Basra:

It is very important to ascertain whether all those respondents are native to Basra or other cities. This is essential in order to make a correct evaluation of the information gathered during the fieldwork if most of the respondents were born outside Basra or immigrated to it recently, this means the answers are less clear because they have little idea about the traditional identity of the city, Figure 6-17.

As seen in Figure 6-17 the majority of respondents for the three areas are living in the city between 20-40 years ago, about 42%, while the less percentage of them 11% who are living in it no more than 50 years, most of them in traditional areas. 30 % of respondents were living less than 20 years, most of them from the modern area.

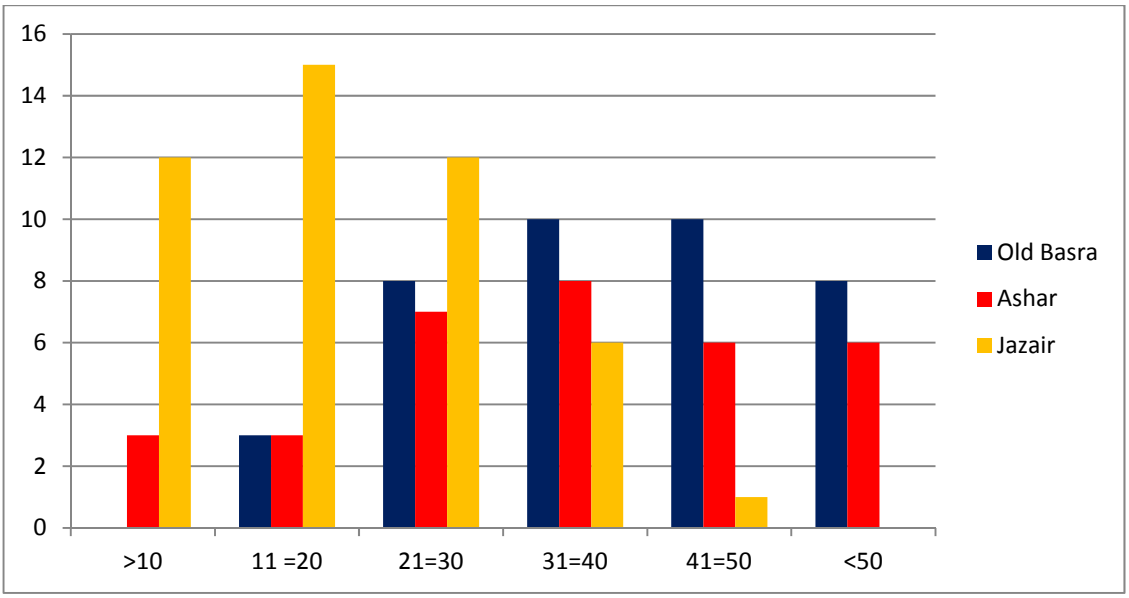


Figure 6-17: The Period of Respondents Living in Basra

6.3.3 Part Two: Traditional Architectural Identity

6.3.3.1 Unique Style of Iraqi Architecture

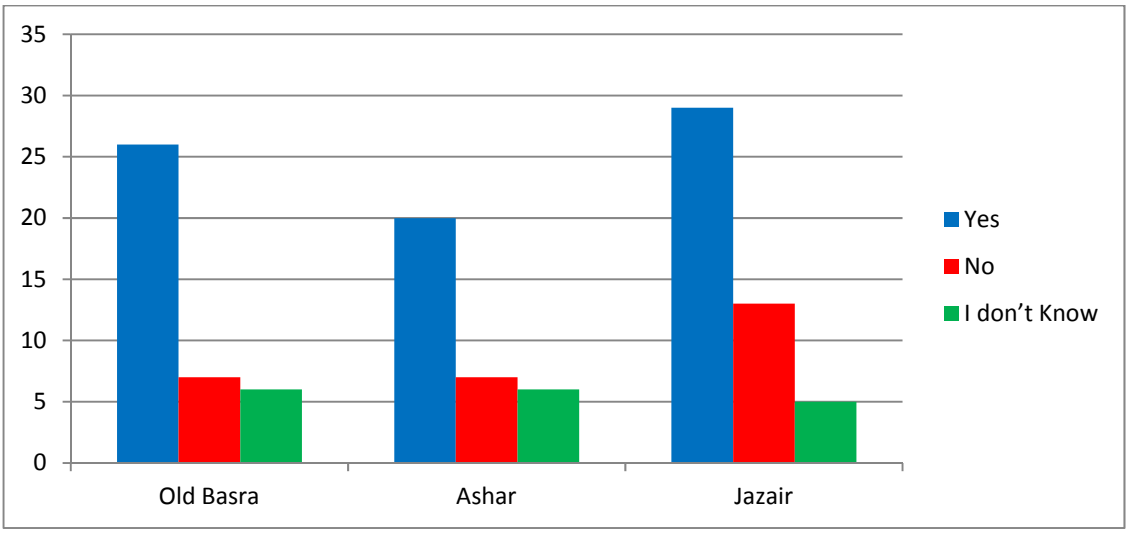


Figure 6-18: Respondents' Opinion About Unique Iraqi Architectural Identity

In order to evaluate the level of awareness of the society with respect to the issue of local architectural identity, the residents were asked whether they believed that there is an Iraqi identity or not. From the survey, it was found that 64% of the respondents in all three areas felt that the Iraqi architecture have a unique style. 21% reported that there was no such a unique style for Iraqi architecture, Figure 6-18.

It is obvious from the results that most the residents within the three neighbourhoods believe that there is a local identity and a distinctive Iraqi style of architecture, this opinion, in particular, was clearer for the elderly residents who have coexistence with these architectural products. In addition, the educational level has had a significant role in answering this question, since most of the supporters of the existence of this unique identity and distinctive style were those who have a relatively high level of education.

6.3.3.2 Reflection of Iraqi Identity on Basra City Architecture

In another inquiry in relation to the identity of Basra city, the respondents in three areas were asked whether Basra reflected Iraqi identity or not. The results indicated that 56% of the respondents in the traditional old Basra neighbourhood felt that the city expressed

their local culture and image, compared to 17% who felt negatively. The data showed that 68% of the respondents in Ashar neighbourhood thought that the city reflected Iraqi identity, however, 23% felt negatively. The respondents in the modern Jazair neighbourhood were also asked the same question. The result indicated that 30% of the respondents felt that the city expressed their identity, while 55% believed that the city did not reflect their identity, Figure 6-19. From these results, it seems that the views of the residents in the three areas were influenced by the environment in which they live. As a result, the residents evaluate the identity of Basra city from their own experience in relation to their particular environment.

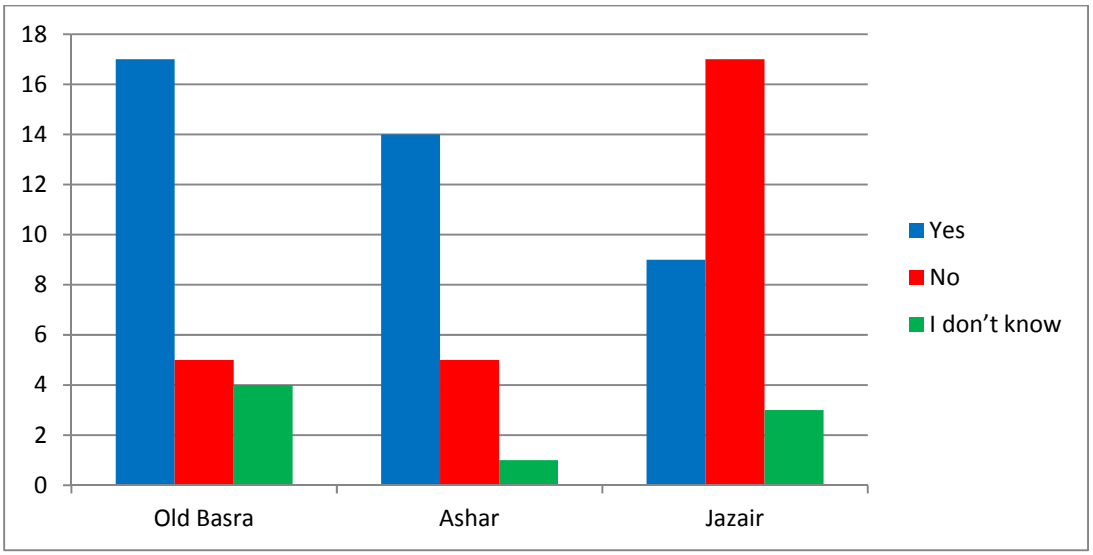


Figure 6-19: Respondents' Views on whether Basra City reflects Iraqi Identity

In order to know the level of which the resident's evaluation for belonging the Basra architecture to the distinctive style of Iraqi architecture, the residents who recognized the existence of an Iraqi local identity were asked whether the architecture in Basra belonging to the Iraqi identity or not.

The results showed that the most residents in the Old Basra and Ashar neighbourhood believe that the architecture of Basra belongs to the Iraqi identity, in contrast to the residents of the modern neighbourhood of Jazair, who they do not believe that. This indicates that the residents have presented their views according to their background which created by the mental images they have for the place who they live in, and based

on comparing the existing architectural products in their areas with the distinctive features of the Iraqi architectural identity. Thus, the residents of Jazair observes the disconnection of the architecture in their area from the architectural references formed by the Iraqi architecture, this disconnect indicates the crisis in the current architectural identity, which confirms what was mentioned in Chapter three and four regarding the alienation of the contemporary Basra's architecture than the authentic identity. This alienation has not observed by the residents of Old Basra and Ashar since their areas are still conservative on traditional architecture derived from Iraqi heritage. It should be noted that although the area of the Ashar was built during the British occupation period and its design according to the British architectural style, which adoption of some foreign elements and material, the respect of the local identity was evident in several aspects.

6.3.3.3 Feature Expresses the Iraqi Architectural Identity:

The respondents in three areas were asked to indicate which architectural feature they thought that could express the Iraqi identity; the result showed that most residents in all three areas 30% thought that the existence of interior courtyard is the main features that reflect the Iraqi architectural identity, Figure 6-20.

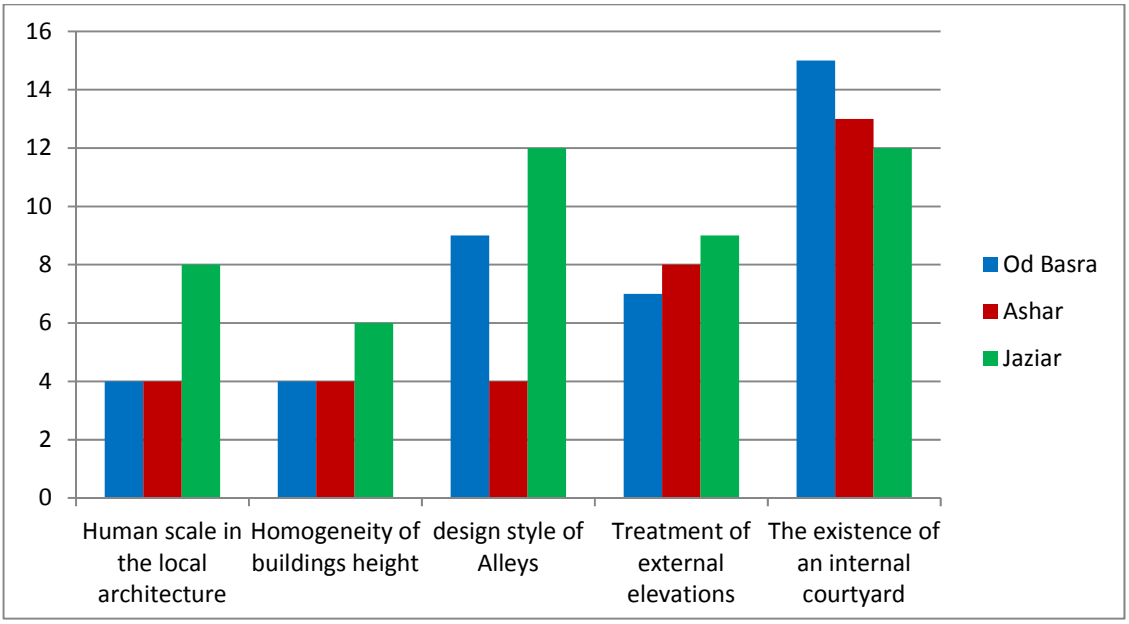


Figure 6-20: Opinions of Residents about the Iraqi Architectural Identity Expressing

Some other residents 22% thought that design style of alleys is the features that express the identity of Iraqi architecture, while 20% indicated to treatments that used to elevations as main identity feature. Others mentioned to the human scale and homogeneity of buildings height in the traditional Iraqi city.

In order to clarify the most important features that reflect the Iraqi architecture according to the view of the residents, they were asked to select the most important feature or element may reflect the character of Iraqi architecture.

According to the results of the survey, the internal courtyard is one of the most important elements of Iraqi architecture, because the courtyard is existing in all buildings including houses, offices, markets, mosques and others, Thus, it is a distinctive and dominant element. The importance of this element according to the major role that it played in the traditional architecture as it is a social component helps to create an internal environment with a high privacy for the residents within the dwelling, and provides an opportunity to meet the family members, in addition to its use as a safe play area for children. In terms of the environment, its create comfortable internal environment and provide protections from climatic conditions where family members resort it in the summer.

The second distinguishing characteristic of Iraqi architecture according to the opinions of the residents is the design style of streets and alleys, which is a unique feature and clearly reflects the distinctiveness of Iraqi identity in terms of the hierarchy of the network of streets and alleys, in addition to other features such as narrow and twisted.

The exterior façade style has chosen to be the third distinctive feature of the Iraqi architecture. The Iraqi architecture distinguished by deeply selecting for the elements consisted the facade and the relations between these elements in addition to the materials used in the facades.

The human scale is the fourth element reflecting the Iraqi architecture according to residents' ranking of the three neighbourhoods. The traditional Iraqi architecture respected the human and dealt with the height of the buildings, the elements used in the buildings, the internal spaces and the width of streets and alleys in addition to the dimensions of public spaces by considering the human scale. Therefore, the Iraqi

architecture considered as a human architecture, which is what lacked in the modern architecture that ignores the human and does not respect his scale.

Finally, the residents mentioned the homogeneity in the heights of the buildings. The traditional architecture was a homogeneous especially in regard to the height of the buildings, as it is an inherited feature from the Islamic architecture that emphasizes that the houses and other buildings within the Islamic city should be in a uniform height to ensure privacy and prevent the direct sight which can be occurred if the heights are different. In addition, the uniformity of buildings' height creates a harmonious urban landscape for the city since the sky line is unified.

6.3.4 Part Three: Modern Architectural Identity

6.3.4.1 Global Architecture Impact on Basra

The respondents in three areas were asked if there a clear global architectural impact in their neighbourhood. As seen in Figure 6-21, the results showed that the majority of respondents, 66% in a traditional neighbourhood in old Basra pointed out that there is no clear impact on a global architectural style in their neighbourhood, while 26%of them had referred for the influence of globalisation.

The same percentage of respondents, 66% in the Ashar neighbourhood study stated that no global impact in their neighbourhood architecture, while the residents who felt the impact of global style was 28% of respondents.

The same question was asked for residents in modern neighbourhood area, 64% of respondents observed the clear impact of global architectural style in their area, on the other hand, 29% does not agree with those.

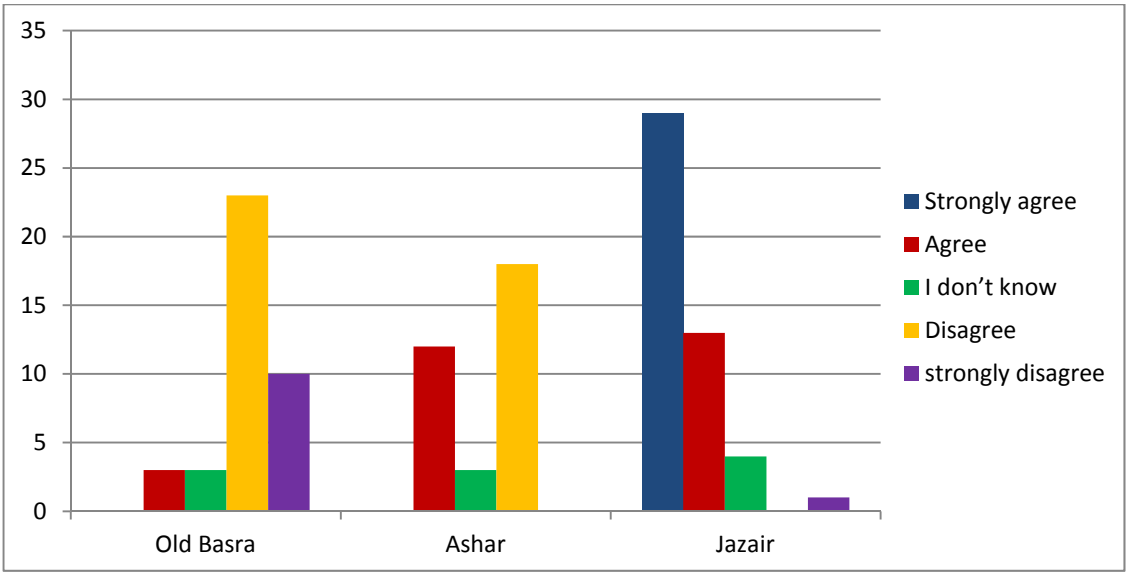


Figure 6-21: Opinions of Residents about the Global Impact on City Identity

6.3.4.2 Appropriate of New Building Materials for Basra Climate:

The result of the respondents regarding the new materials that used in the building and its suitability for city climate, showed that the majority of respondents, 76% in the traditional old Basra area pointed out that it's not suitable for the climate of the city, while 16% seeing it be suitable, Figure 6-22.

The results of the second neighbourhood area in Ashar showed that 77% of respondents thought that new materials are not suitable in regard to climate and other aspects, whilst 23% of residents declared it suitable.

The responses of respondents in the modern neighbourhood were 47% of them believed that new materials are suitable for the city regarding connecting with the world. However, 36% of respondents considered the new materials as not suitable.

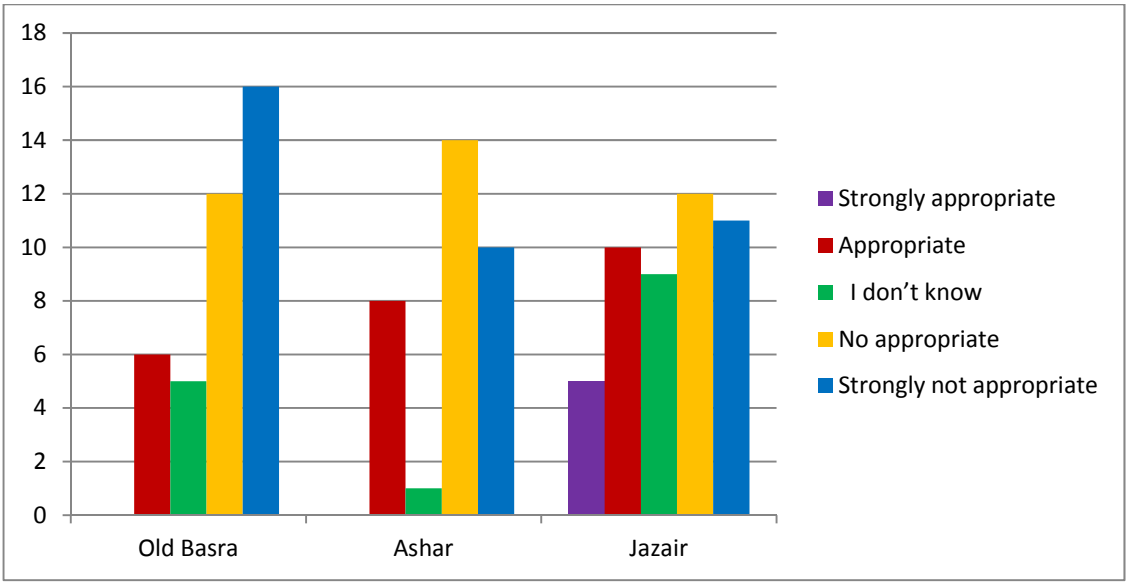


Figure 6-22: Suitability of New Materials for Basra Climate

6.3.5 Part Four; Comparison of Traditional and Modern Identity

6.3.5.1 Relationship with the Neighbours

In order to examine the relationship between residents, the respondents were asked about their relationship with their neighbours. The majority 64 % of the respondent's Figure 6-23 in traditional neighbourhood indicated that they had a good relationship with their neighbours while 35% had a fair relationship, and nobody felt they had a poor relationship.

The relationship between neighbours in second neighbourhood in Ashar was also measured. The results indicate that 54% of the respondents living in this neighbourhood have a good relationship with their neighbours, while 36% felt the fair relationship, and only 9% felt they had a poor relationship.

The relationship between residents from the modern neighbourhood was also tested. 20% of the respondents indicate that they have a good relationship with their neighbour's Figure 6-23, while 68% have a fair and 12% have a poor relationship.

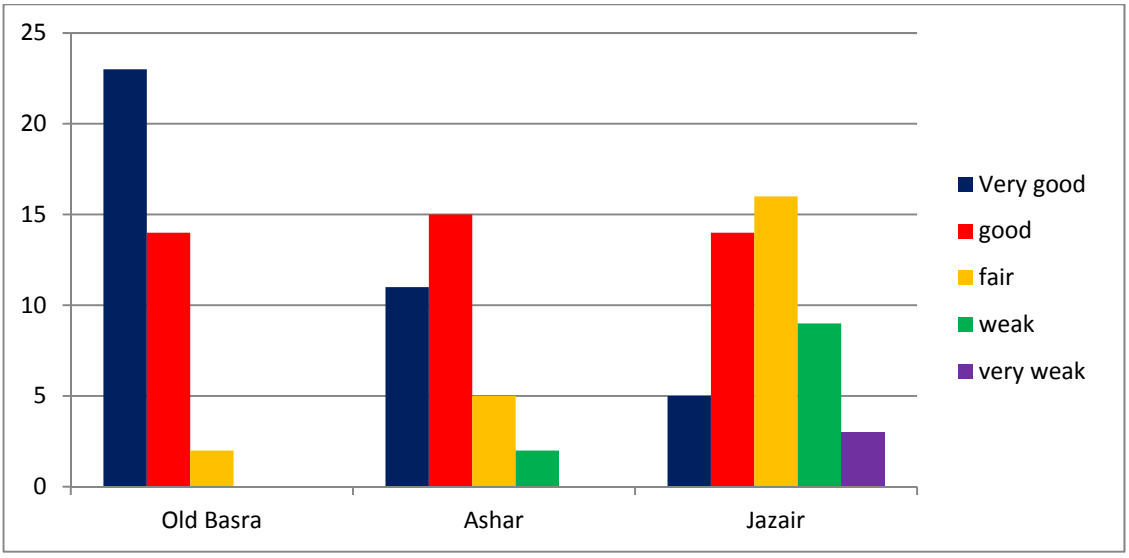


Figure 6-23: Respondents' Evaluation Regarding the Relationships with the Neighbours.

The above results show that there is a strong relationship between the planning layout and the relationships between the neighbours within the residential area.

The results showed that the majority of the residents in the old Basra neighbourhood have strong or very strong relationships with their neighbours, the reason behind that is related to planning style in their residential neighbourhood, which helps to strengthen those relationships, since it providing multiple opportunities to the residents to meet each other, through the presence of narrow streets and alleys, convergence of doors of houses, attached houses, small area of the house, in addition to the non-access of the vehicles into the residential area, all these features have created opportunities for the residents to meet their neighbours in the street during the daily trip for shopping, work and school.

Moreover, the lack of play areas for children within the houses of traditional neighbourhood of Old Basra, since the lands of houses are small, leads children to play outside of houses which help them to develop relationships with other children, especially if the outside provide a safe environment for them. The presence of public spaces in this residential area also helps to strengthen relationships between neighbours, such as cafes and local markets. Each neighbourhood in the traditional architecture has a particular own market, which regarded a suitable environment to create and strengthen

relationships between local residents and prevents the entry of strangers who they are from out of the area.

On the other hand, the modern neighbourhood of Jazair lacks the features that help to build relationships between neighbours. The streets of the Jaziar neighbourhood are wide; the houses in this area are characterized by a large area of up to 600 square meters per house. Each house includes a large front garden and another rear one, houses of this area are dis-attached, the facade of the house is wide as the land is large, and that led the houses entrances to be far from each other. All the houses in Jazair neighbourhood have a garage for the car within the house.

All these features have prevented people from meet each other and not provide suitable opportunities for social interaction even for children, the existence of a large garden and many open spaces inside the house can be exploited as play areas for children, prevents children to communicate with others within the residential area, particularly in the case of wide streets which is dangerous to children and does not provide a safe environment to play in.

Moreover, the neighbourhood markets are considered public markets and are not exclusive to the local residents because the neighbourhood is easy to penetrate by strangers. Therefore, these markets do not constitute an appropriate environment for enhancement social relationships of neighbours, especially in regard to women. All of the above illustrate the weakness in social relations of the residents in the modern neighbourhood of Jazair.

6.3.5.2 Effect of Design Styles of Roads and Streets in Community:

The residents in three areas were asked to evaluate the effect of design styles of roads and streets in their community, in the traditional Old Basra neighbourhood the majority of responses, 62% indicated that the planning of the streets had no negative effect, while 24% felt that it's not satisfying, Figure 6-24.

In Ashar neighbourhood study the level of satisfaction with street layout was slightly up to 64%, whilst other people 32% felt negativity with streets style. In Jazair modern

neighbourhoods, 18% of the respondents indicated that the streets had a positive impact. On the other hand, 45% of the respondents felt unhappy with their street design because it's danger, especially for children and old people.

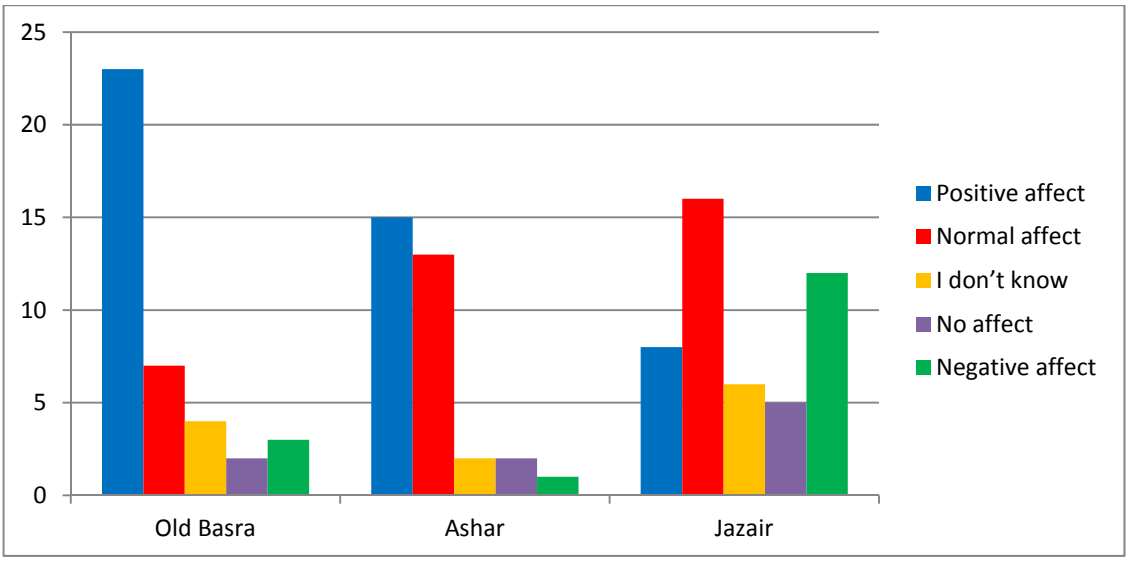


Figure 6-24: Resident's Opinions about Effect of Street Planning

In order to clarify the impact of streets and alleys design style on the community, the results showed that the street style in the traditional city has had a positive impact on the residents of the neighbourhood. This is done by providing privacy to the residents, since the fact that the streets are narrow and contain a clear hierarchy from general to private helps prevent the entry of strangers into the residential locality.

The complex organic system adopted in the traditional neighbourhood leads to confuse the movement of strangers within the area, accordingly, the strange person loses his right direction because of the lack of an obvious mental picture for him regarding the planning system of these streets as a consequence of the complexity of design, which is Leading to the disruption the stranger movement. Therefore, the penetration within the neighbourhood streets is limited to the local people.

In addition, the narrowness of streets and alleys of the traditional areas creates more opportunities to meet with neighbours and thus leads to strengthen social relationships within the residential neighbourhood. The twisting of alleys creates a visual enrichment

for the pedestrians and reduces the boredom that may they feel through the changing of the urban scene from time to time which is motivates people to walk. As well as, the winding alleys shape provides a high level of safety through the complicating the network as mentioned previously.

From the environmental view, the narrowness of these alleys and the presence of two-storey buildings on both sides provides shade for the pedestrians along of the days of the year, especially in the harsh summer, and creating a comfortable environment for pedestrians. In addition, the twisting of these alleys leads to accelerate the air movement which help the people to walk during the harsh summer.

The most important negative point that rise regarding the style of streets of the traditional areas is the difficulty of the movement of the vehicle within the area and lack of its access to the house, which is considered a weak point in this system, especially at the present time in which the community depends entirely on the vehicle.

While In the modern area, the movement system is clear and straight because it is based on a perpendicular network of streets, The wide straight streets allows the strangers to pass through and do not prevent them to penetration into the neighbourhood, leads to weakness or loss the privacy of the residents. In addition, the wideness of these streets does not support the interaction between neighbours, as a result the social relationships between them become weak.

Regarding the environmental aspect, in a city like Basra which is daily exposed to a high degree of solar radiation, the wide streets are not provide suitable environmental solutions for pedestrians, so the walking in these streets will be non-stimulatory because they are not shaded in addition to its length and straight. According to that, the static urban landscape along the journey will be dull and non-motivating to continue walking.

As these streets supports the movement of cars, the vehicles movement usually be fast because streets are wide and a catalyst for speed, therefore this environment is considered un-safe especially for children who playing outside the home.

In the Ashar neighbourhood, which is related back to the British period, the streets are straight in public areas and on the borders of residential areas, while within these residential areas they are designed in a twisted and non-straight way as in traditional areas. However, they allow passage of vehicles because they are not narrow.

6.3.5.3 A Building that Connects with Past and Memory:

The residents were asked if they had in their memory any landmarks, special buildings or other urban elements that connecting them with city identity. The result indicated that 74% of respondents in traditional old Basra area have named a building or a place, while 15% of the respondents reported that they did not remember any particular physical element, Figure 6-25.

The survey data showed that 81% of all respondents in Ashar neighbourhood could remember a place or building that held a historical and symbolic meaning for them, while 18% could not remember, Figure 6-25. Residents in the Jazair modern neighbourhood were also asked to indicate if there was any significant building or urban element that acted as a good reference for them. 51% named a building or a place, while 40% were unable to cite any building or landmark in their area.

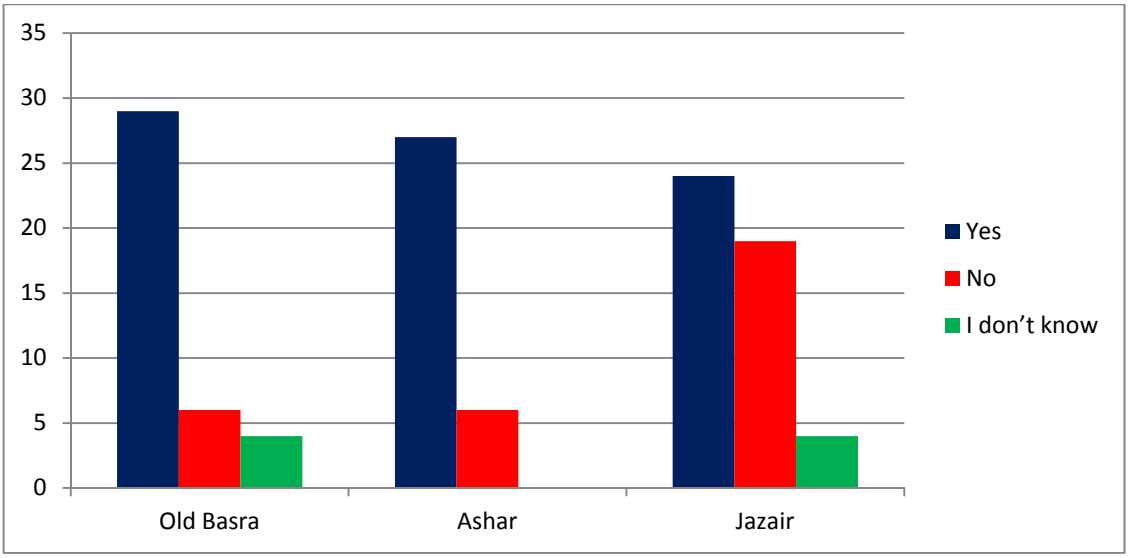


Figure 6-25: Residents Opinions Regarding Connection to the Past

The authentic architecture is the one that produce architectural images that remain in the memory of the residents for a long time and take root in their minds. Thus, In order to test the collective memory of the residents regarding the issue of local architecture, the residents within the three neighbourhoods were asked to identify a building or place that is still firmly rooted in their minds and linking them to the past, history and heritage.

The identifying of a building or a place by residents which still in their memory, can be useful to the research in order to examine this building and analysis it, and clarifying the main elements that formed it. As a result, can be drawn elements that agreed by the majority of the residents to be as reference elements to the architectural identity of the city.

The majority of the residents in the old Basra neighbourhood were able to identify a number of buildings and traditional places within their area easily and quickly, these buildings are representing architectural references that reflected the identity of Basra in their memory. As well as in the area of Ashar has been identified a number of buildings easily and quickly. However, the situation was different in the neighbourhood of Jazair, the residents faced difficulty in identifying a specific building which is still in the memory of residents within their area, and therefore many, especially from the young generation, not succeed on select a building or place.

Therefore, as the result mentioned that the memory of the place in the traditional area seems to be very strong, while it is weak or non-existent at all in the modern areas, which leads to weakness and loss of belonging to the local built environment, as the residents do not own mental images in their memory regarding the built environment in which they lives, and do not feel attached with it. Therefore, the residents consider this environment unfamiliar to them, even though they live in it.

6.3.5.4 Name of Building or Place:

Residents who felt that they related with the past through the memory of some of the architectural elements or place were asked to name these places. As seen in Figure 6-26, the majority of respondents in traditional areas of old Basra 55% named the traditional

house in old Basra neighbourhood and felt a strong link to it. Some other respondents, 45% named the shanashil.

In Ashar neighbourhood 48% of respondents named the Ashar Market and felt they were good reference points in their community. Another group, 30% reported that Basra Model School building whilst 15% named Al-Amir Mosque as a good focal point they indicated that mosque and minaret provided a good focal point, only 7% named Dockyard Island.

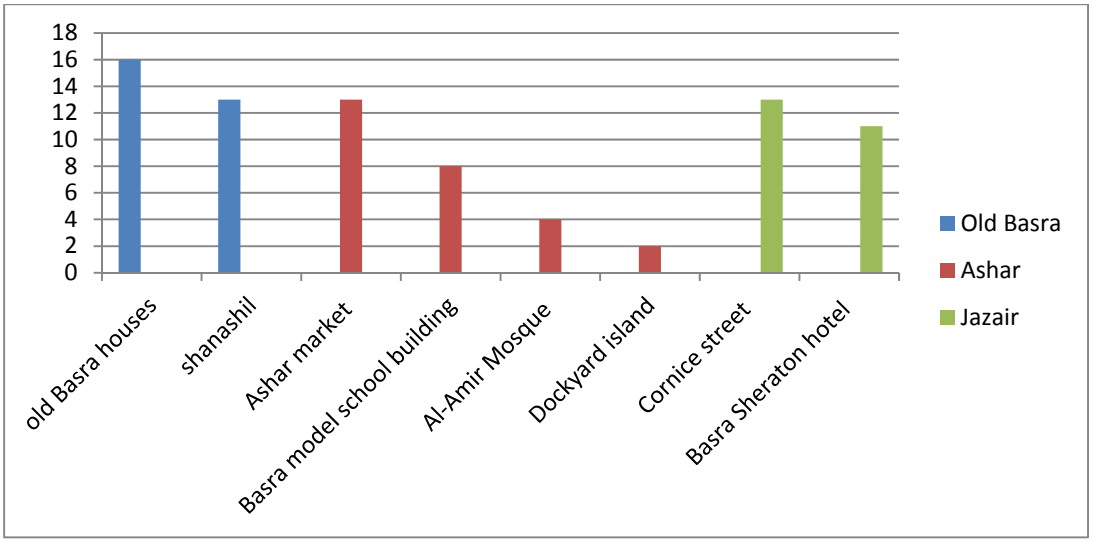


Figure 6-26: The Residents Choices Regarding a Building or Place links Them to the Past

Residents in the modern neighbourhood were also asked to indicate if there was any a significant building or architectural element that acted as a good reference point for them. Most of the residents, however, were unable to cite any major landmarks in their areas. However, some residents did mention two places located in their neighbourhood, 54% of responses named Cornice Street, whilst46% reported the Basra Sheraton hotel.

Most of residents in the Old Basra neighbourhood chose two architectural elements that reflect their association to the past: the traditional Basra's house and Shanashil. Which they consider them the most important elements of Basra architecture. As shown in Figure 6-27.

In the Ashar neighbourhood, the residents chose four main buildings, which they believe that they reflects a model of the traditional architecture of the city which are: Ashar Market, as showed in the Figure 6 28, which includes large number of symbols and heritage elements that provide visual richness to the recipient and creates urban continuity, in addition to the unity and harmony in building materials and the height of buildings, as well as the protection from external environmental conditions via use roofing to creates a safe and comfortable environment that encourages social interaction.

Figure 6-27 : The Shanashil of Basra

Figure 6-28: Ashar Market

The Basra Model school in the Ashar, Figure 6-29, is one of the most important architectural monuments in the city of Basra, still retaining an artistic and architectural value as well as capable of constituting an example for the future generations with its accurate architectural details, in so providing a model of what educational buildings should be.

Figure 6-29: Basra Model Scholl

Number of the residents referred to the building of the Al-Amir Mosque in the middle of the Ashar area to be a symbol of the memory of the place, Figure 6-30, indicating that it represents a focal and attraction point in the centre of neighbourhood, in addition to richness of architectural details of this mosque, therefore it considers as a clear and important architectural monument.

Figure 6-30: Al-Amir Mosque

Other residents mentioned the Dockyard Island, as a distinctive architectural element in the area through its location and planning, Figure 6-31. Although it is difficult to recall a

building or a place associated with the history of the city and its traditional architecture by the residents of the modern neighbourhood of Jazair, some of them, especially elderly people, chose Corniche Street as an important and distinctive landmark of the city.

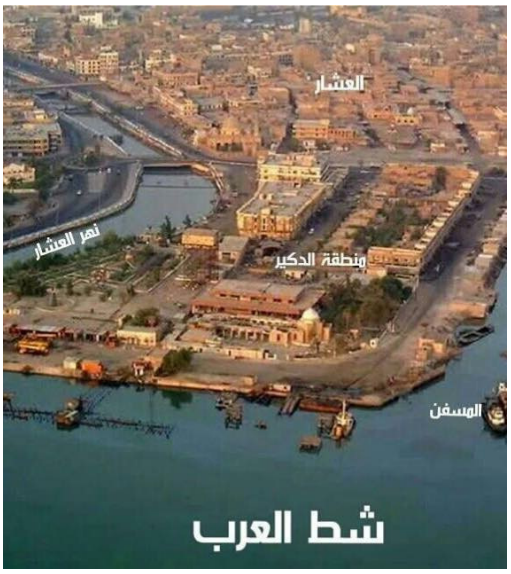


Figure 6-31: The Dockyard Island

Others referred to the building of Basra Sheraton Hotel, despite being a modern building and not historical, but it involves the architectural heritage and reflects the local architecture of Basra through the simulation of the Shanashil in a creative way in its facade, as well as through the use of the inner courtyard as a metaphor of the legacy of the traditional Iraqi house. Moreover, it contains other traditional elements such as arches and the use of local materials such as wood, Figure 6-32.

Figure 6-32: The Basra Sheraton Hotel (before and after the reconstruction)

It is worth mentioning that this building was restored after the damage and destruction during the war in 2003. However, it is observed that the reconstruction process did not respect the heritage value of the city since it distorted the building by using new alien materials instead of the traditional materials that was used earlier, as in Figure 6-32.

6.3.5.5 The Appropriate Architectural Style of Privacy

Regarding privacy, the residents were asked to select which kind of neighbourhoods more appropriate in terms of architectural style for Iraqi local society. The results showed that 71% of respondents in the traditional old Basra area believe that traditional neighbourhood style provided a high level of privacy for residents who live in, the same percentage of respondents in Ashar area supported the traditional choice. While 52 % of the residents in the modern area thought that modern neighbourhood style more appropriate for local society in terms of privacy.

On the other hand, 24 % of the residents in old Basra thought that modern style of the neighbourhood given more privacy for people. 19 % of respondents in Ashar have the same belief. While 39% of residents in the modern area Jazair thought that traditional neighbourhood style better than modern in terms of privacy issue.

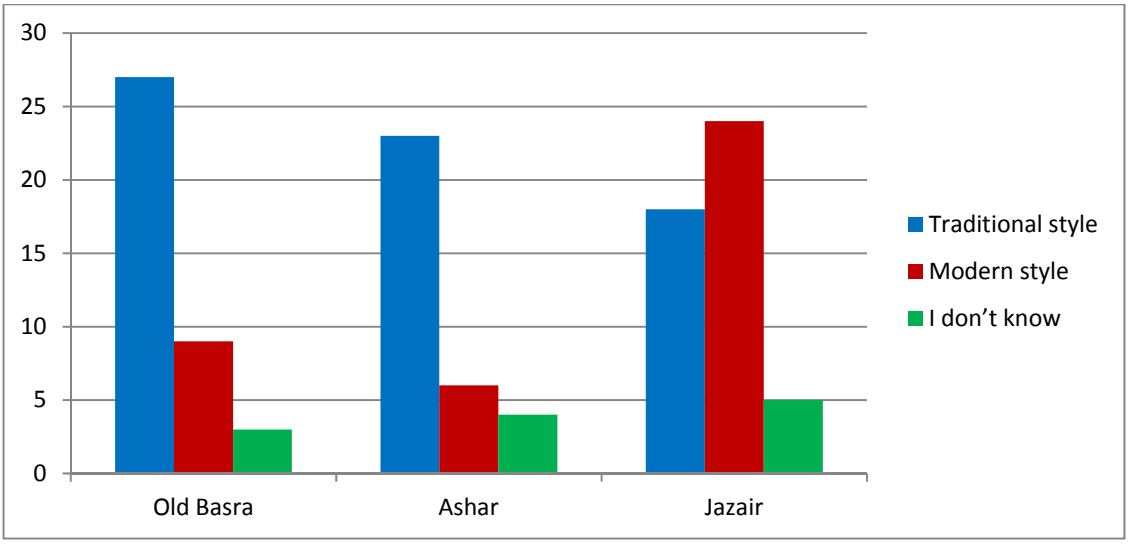


Figure 6-33: Resident's Opinions about Better Neighbourhood Style for Privacy

6.3.5.6 The Appropriate Style of Architecture for Basra Climate:

The opinions of respondents about the suitability of traditional and modern buildings to climate that shown in Figure 6-28, clarify that the majority of people 73% who live in a traditional old Basra area believed that traditional building style more suitable for the climate of Basra, While the percentage was slightly upper in Ashar with 80% who have the same opinion, The residents who thought that the traditional building style suitable for the climate of Basra in the modern area of Jazair 37% of respondents.

On the other hand, in the traditional area, there were 23% of respondents mentioned that the modern style of architecture is suitable for the climate of the city. 10% in Ashar area supported their opinion, while the majority in modern area of Jazair 62% declared that modern style more appropriate for Basra's climate than the traditional style.

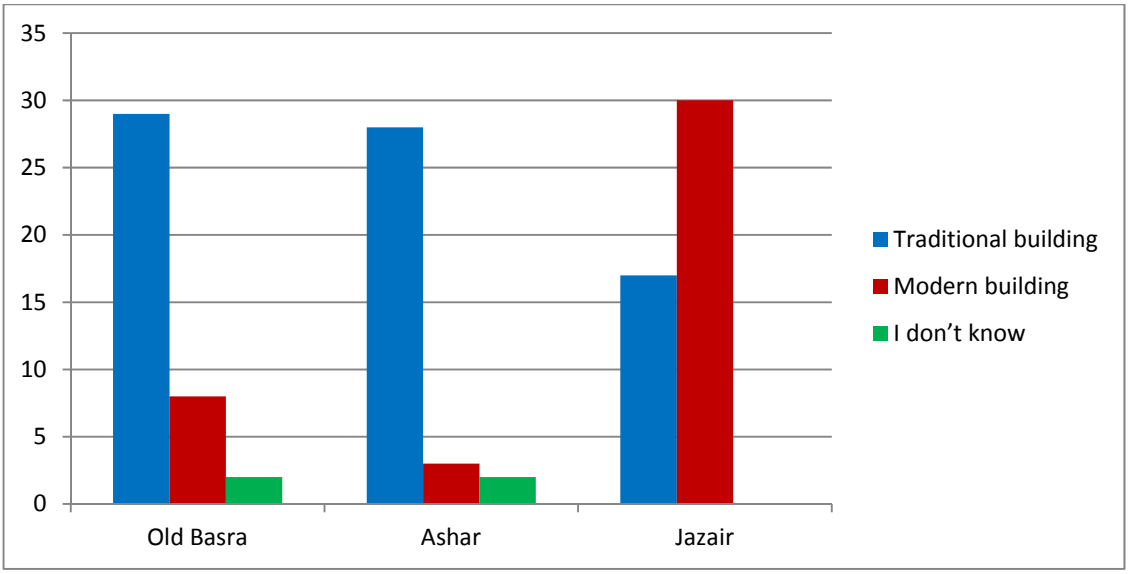


Figure 6-34: Respondent's Opinions About Best Architectural Style for Basra Climate

6.3.5.7 The Familiar Style of Architecture:

Regarding familiarity, the residents in three neighbourhoods were asked whether they feel familiar with the traditional or modern style of buildings, most respondents, 77% in all three areas pointed out that they feel familiar with the traditional style of architecture.

While 15% of the respondents in all areas, most of them in the modern neighbourhood of Jazair, stated that modern style more familiar to them, Figure 6-35.

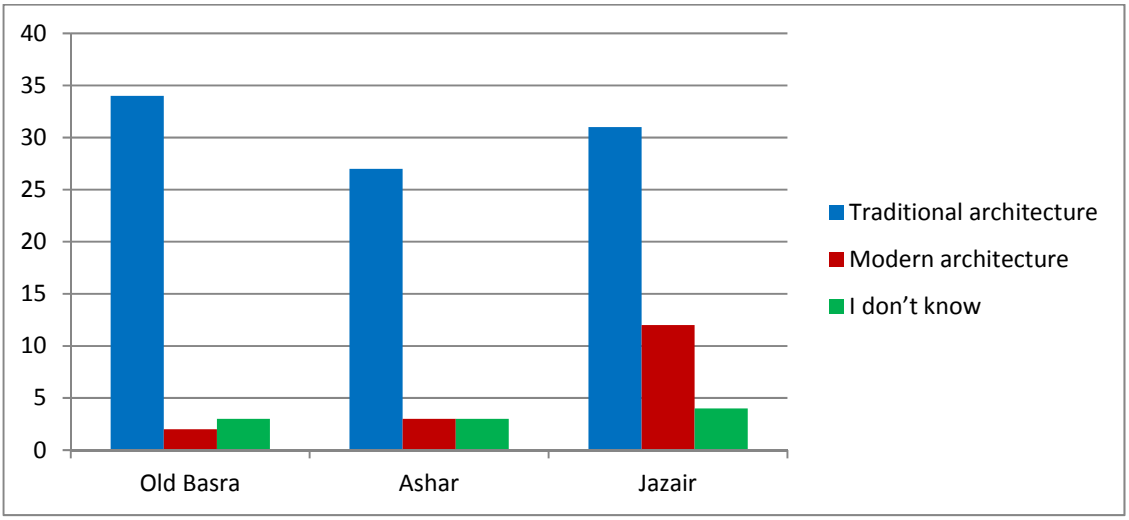


Figure 6-35: Respondent's Opinions regarding the Best Architectural Style in terms of Familiarity

6.3.5.8 The Attractiveness of Marketplaces

According to the results from the respondents in terms of the style of the market, the result in Figure 6-30 reported that 58% of the traditional old Basra area preferred modern style of markets, while 39% of them supported the traditional market. In second area neighbourhood of Ashar, most of the respondents see that the modern style of markets is more attractive than traditional, Figure 6-36.

The other respondents, 33% feel keep attached to the traditional style. The majority of respondents in Jazair modern area 63% supported modern market style, on the other hand, 33% in the same area preferred the traditional style.

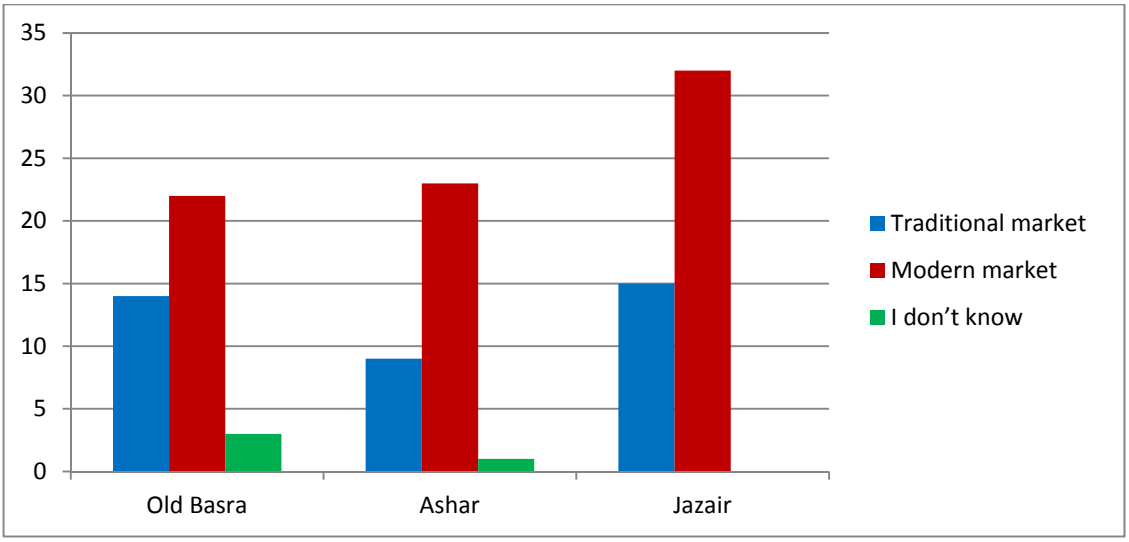


Figure 6-36: Respondent's Opinions regarding Attractiveness of Markets Style

6.3.5.9 Social Relationships in Neighbourhood

Regarding comparison between traditional and modern architectural style, the residents in three areas were asked whether the modern or traditional neighbourhood have stronger relationships between residents who live in, the majority of respondents in all areas declared that traditional neighbourhood style has strong relationships between neighbours because it provides multi chances to meet each other's by multi activities that It owns. 92 % in the old Basra area, and 90% in the Ashar area of respondents, in addition to 66% in the modern area of jazair supported that opinion.

On the other hand, only 3%in old Basra Area and only 9% in the Ashar area of respondents, thought that modern neighbourhood could provide a high level of social interaction between neighbours, as well as 29% of the respondents in the Jazair modern area, as seen in Figure 6-37.

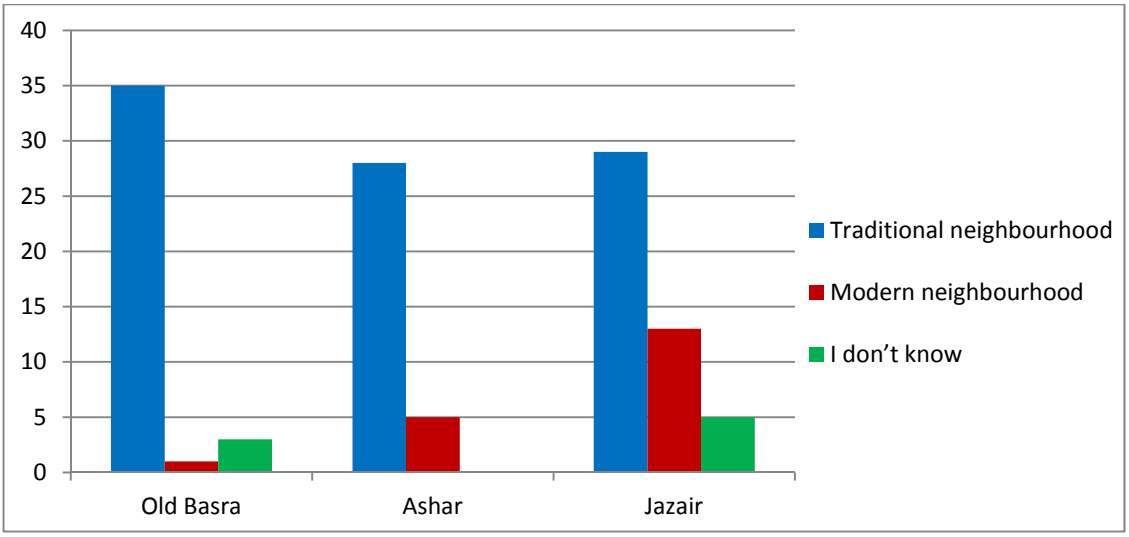


Figure 6-37: Respondent's Opinions regarding Best Style of Neighbourhood in terms of Social Relationships

6.3.5.10 Safety and Security

In terms of safety for children in neighbourhoods, the residents in three areas were asked whether the modern or traditional neighbourhood style is more secure and safe for their children, as a show for the results in Figure 6-38.

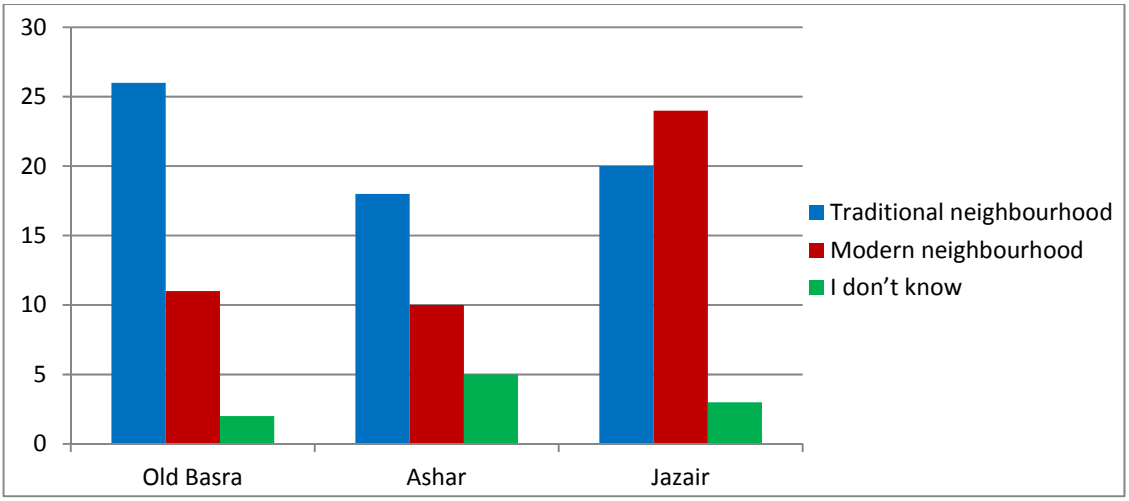


Figure 6-38: Respondent's Opinions regarding Safety and Security of Children within Neighbourhood

In the traditional old Basra area, 67% of respondents stated that traditional neighbourhood more safety for children, because no risk for accidents in the street where children are playing since these streets are narrow and empty always Moreover the existence of courtyard in houses could use as a playing area for them. 57% in Ashar supported that for similar reasons, as well as 42 % of respondents in the Jazair modern area.

On the other hand, 30 % in old Basra area, 33% in Ashar area, as well as 51% in the modern area of Jazair of respondents thought that the modern style of neighbourhoods provides more security for children, because the garden in the house could use as playing area for them, as well as the location of the school in modern neighbourhood's design better than in traditional.

6.3.6 Part Five: The Main Factors Influenced Identity

6.3.6.1 Evaluation of the Privacy Level:

Regarding privacy, the respondents in three areas were asked to evaluate the level of privacy that they feel in their neighbourhood.

The results show that the people in the traditional area of old Basra about 50% feel strong privacy in their houses and their neighbourhood roads, while 20% stated that they think haves enough privacy. On the other hand, the same percentage 20% declared that there is no enough privacy in their neighbourhood, as seen in Figure 6-38.

In Ashar neighbourhood, around 40% of respondents feel strong privacy; at the same time about 25% of people were thinking they have enough privacy. On the other hand, 15% declared they didn't feel enough privacy in their neighbourhood, while 6% they believe strongly that they miss privacy.

In the third area of Jazair modern neighbourhood, 27% of respondents complain there is no enough privacy in their neighbourhood, and around 9% of the respondents' evaluations the level of the privacy in their neighbourhood were strongly no privacy, which was the

same percentage (9%) of the people who feel they have strong privacy. 23% of respondents in Jazair neighbourhood believe they have enough privacy, Figure 6-33.

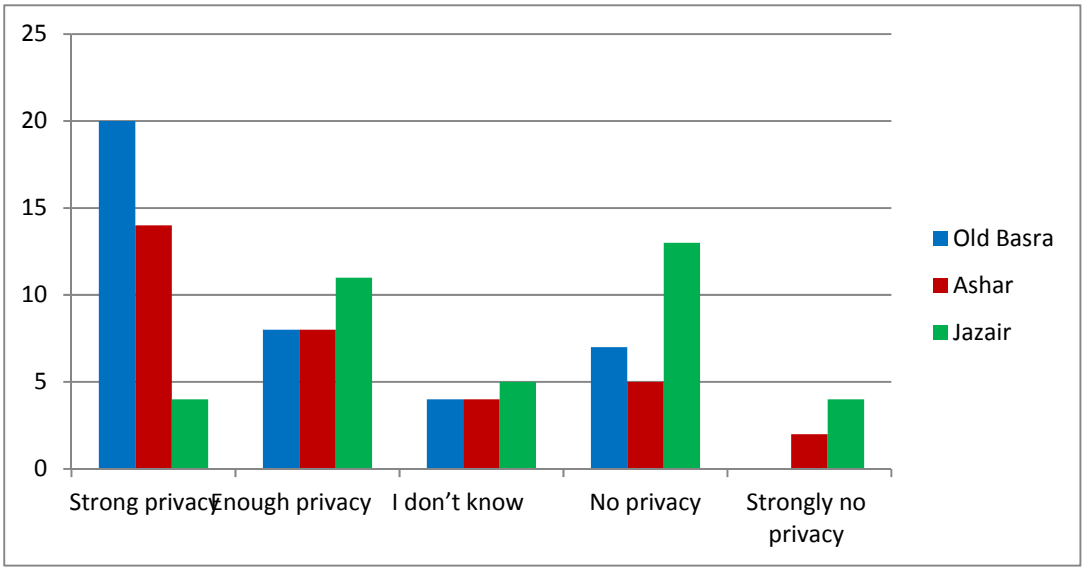


Figure 6-39: Respondent's Evaluation regarding the Level of Privacy in their Neighbourhood

6.3.6.2 Familiarity with Architectural Style

In regard to the familiarity level that the people sense with the architecture in their neighbourhood, the results of respondents reported that the majority of people (57%) in the Jazair modern neighbourhood do not sense familiar with the style of architecture in their area, as clarified in Figure 6-40.

The percentage of people who declared they are familiar with the style of architecture was very close in Old Basra and Ashar areas which are 41% and 42% respectively, while it was in Jazair neighbourhood only 21%.

The largest percentage of respondents who mentioned that they have a strong familiarity with the architecture was in the Old Basra neighbourhood about 46%. On the other hand, only in Jazair neighbourhood, there were about 15% of respondents who felt strongly no familiarity with the style of architecture in their area.

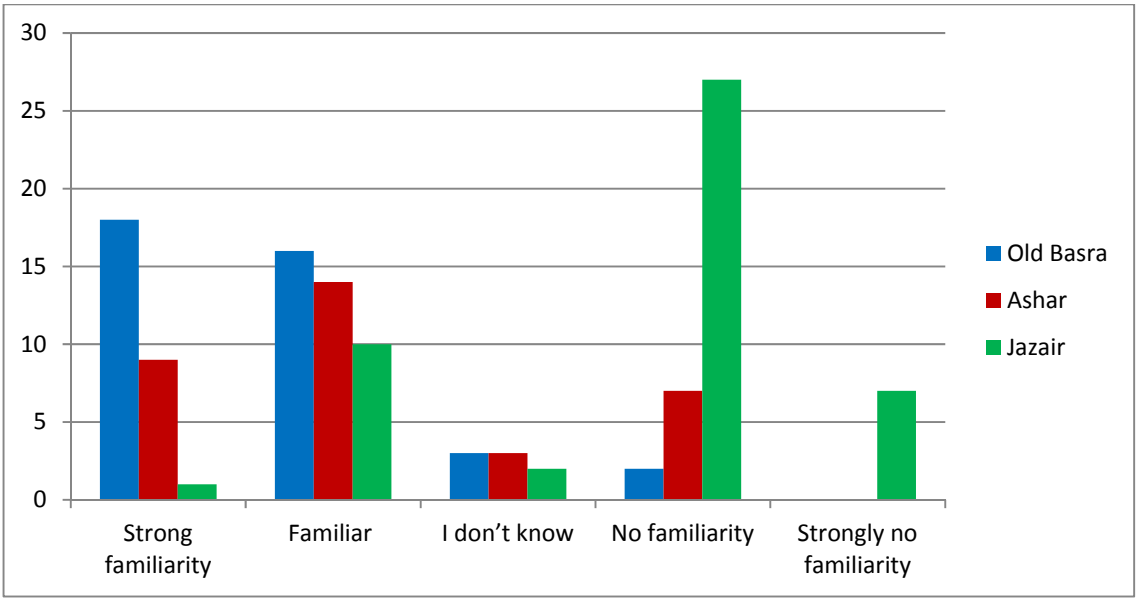


Figure 6-40: Respondent's Opinions regarding the level of Familiarity with the Architecture Style in their Neighbourhoods

6.3.6.3 Level of Safety in the Neighbourhoods

Regarding the safety, the respondents were asked about their evaluations for the degree of safety they feel in their neighbourhoods.

As the Figure 6-35 shows that the most people in the three areas feel safe in their neighbourhood 44%,52%, and 43% in Old Basra, Ashar, and Jazair respectively. However, the people who felt a high degree of safety were in the Old Basra neighbourhood about 46%. While the people who felt that their neighbourhood strongly unsafe, were only in the modern area of Jazair neighbourhood 17%.

The high percentage of people who felt unsafe in their neighbourhood was in Jazair modern area 36%, while in Ashar was 27%, as it clear in Figure 6-41.

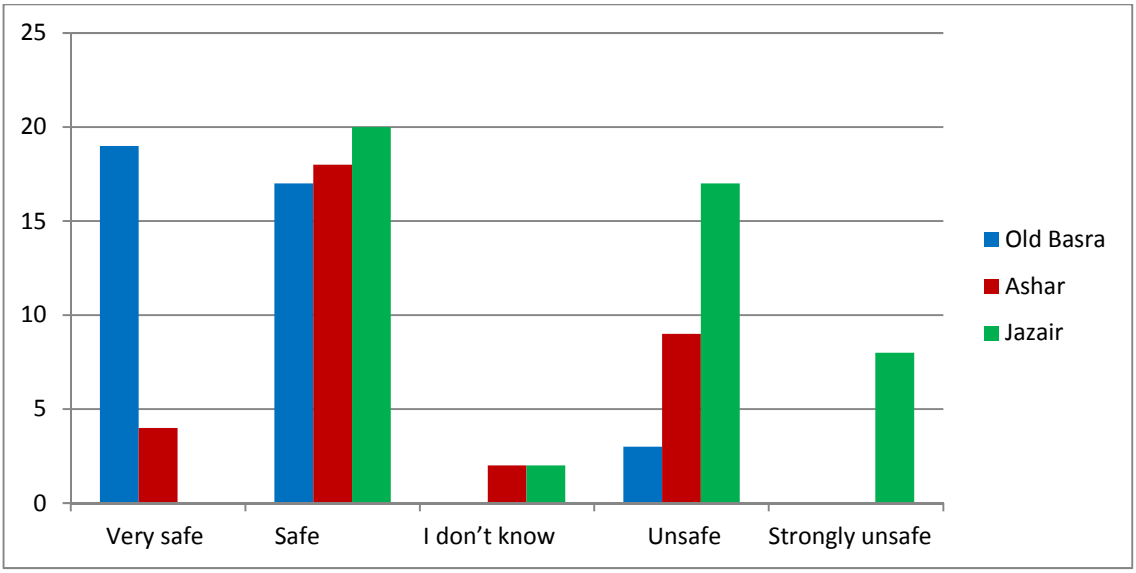


Figure 6-41: Respondent's opinions regarding the Degree of the Safety in the Neighbourhood

6.3.6.4 The Safety of Children Play Areas

The respondents in three neighbourhoods were asked about the safety of the play areas of children in their neighbourhoods. The evaluations of the respondents for the level of safety were different depending on the situation in their area, as it seen in Figure 6-36. However, the majority of Jazair modern neighbourhood 57% was believed that the children play areas are unsafe in their neighbourhoods. While 38% reported that the areas are safe.

On the other hand, the majority of respondents, 54% in the traditional neighbourhood of Old Basra believe the children play areas are very safe, 31% others in the same area reported that these children's areas are safe.

There was no agreement for the respondents' evaluations in the third neighborhood of Ashar about the safety degree of play areas of children in their neighborhood, 48% of them sees that it safe, while 45% believe these play areas are unsafe, 6% others of the respondents reported it very safe, Figure 6-42.

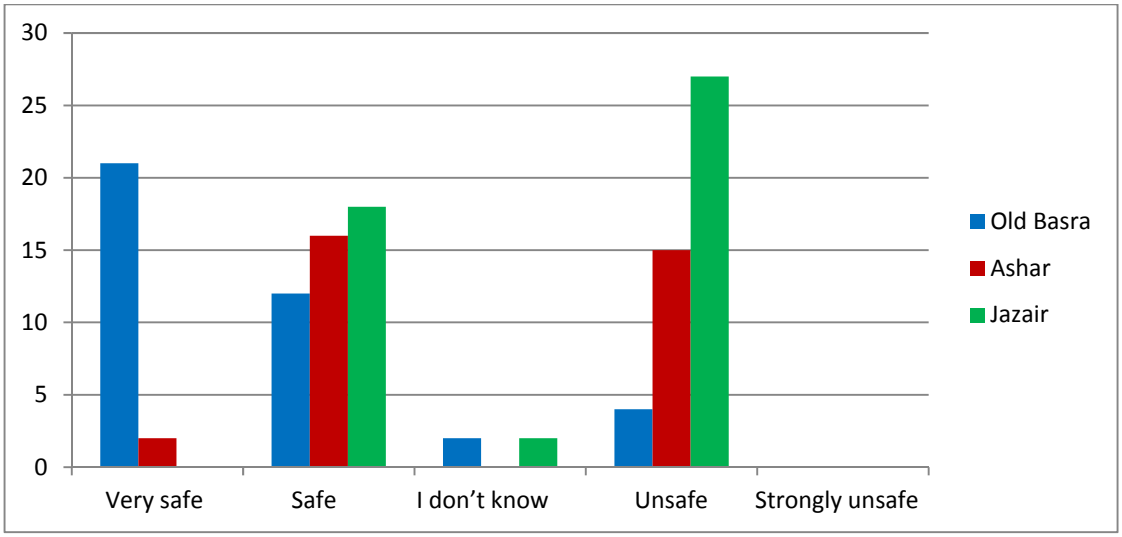


Figure 6-42: Respondent's opinions regarding the Degree of the Safety of Play Areas of Children in their Neighbourhoods

6.3.6.5 Urban Landscape of the City

To inquire about the urban landscape of the city, the residents were asked to assess their area's landscape currently. According to the Figure 6-43, the majority 56% of respondents in traditional areas of old Basra pointed out that its harmonic, because there is a unity in buildings style design. While 19 % indicated that the present landscape of their neighbourhood is a conflicting. 25% of respondents declared that urban landscape is hybrid now.

In Ashar area most of the respondents, 43% assessed the current landscape in their area as a harmonious, on the other hand, 24% had seen it as a conflicted urban landscape, as well as 33% described it a hybrid landscape.

The same question was asked to residents in the modern area of jazair. As seen in Figure 6-43, the majority of respondents, 52% evaluated their neighbourhood architectural landscape is a hybrid, while 41% described it as conflicting architecture because used numerous and different styles. On the other hand, only 7% of respondents mentioned that the landscape of jazair neighbourhood is harmonious.

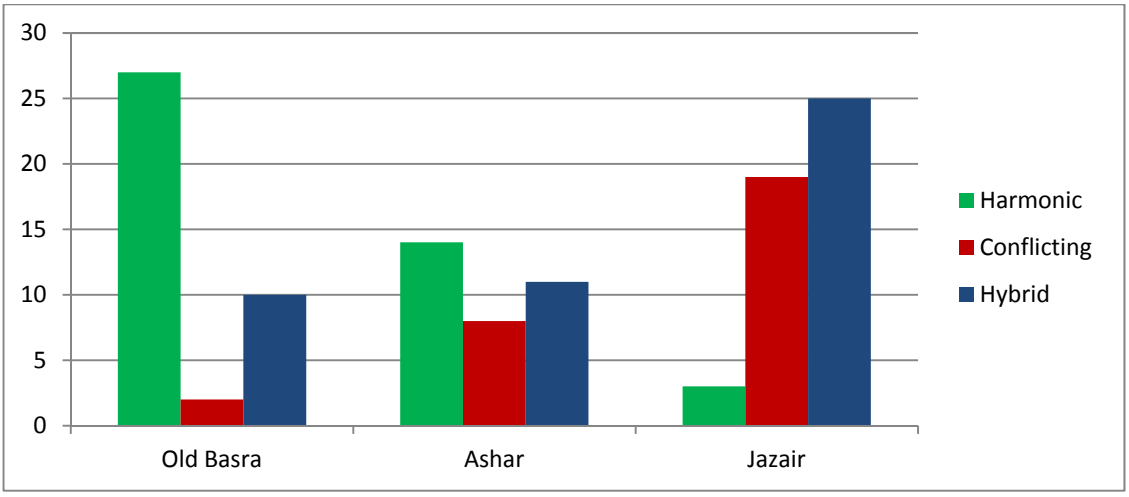


Figure 6-43: Respondent's opinions regarding City Landscape

6.3.6.6 Suitability for Climate for the Neighbourhoods

In terms of the suitability of the design of home and neighbourhood with the Basra climate, the respondents were asked to evaluate the degree of appropriate the design style according to local climate conditions.

Most respondents were mentioned that they believe the design style of their houses and neighbourhoods are appropriate to the local climate. As seen in Figure 6-44, the percentages of peoples believe that were 41%, 51%, 47% in Old Basra, Ashar, and Jazair respectively.

Large percentages of the respondents who believed that the design style of their houses and neighbourhoods is strongly appropriate for the Basra climate were in an Old Basra neighbourhood which was around 31%. On the other hand, the large percentage who believed strongly no appropriate was in the Jazair neighbourhood about 9%.

The largest percentage of respondents in three areas of the survey who reported no appropriate was in the modern area of Jazair neighbourhood, 32% of people who believe it's not appropriate, while the percentage of the same choice in other areas was less as it's clear in the Figure 6-44.

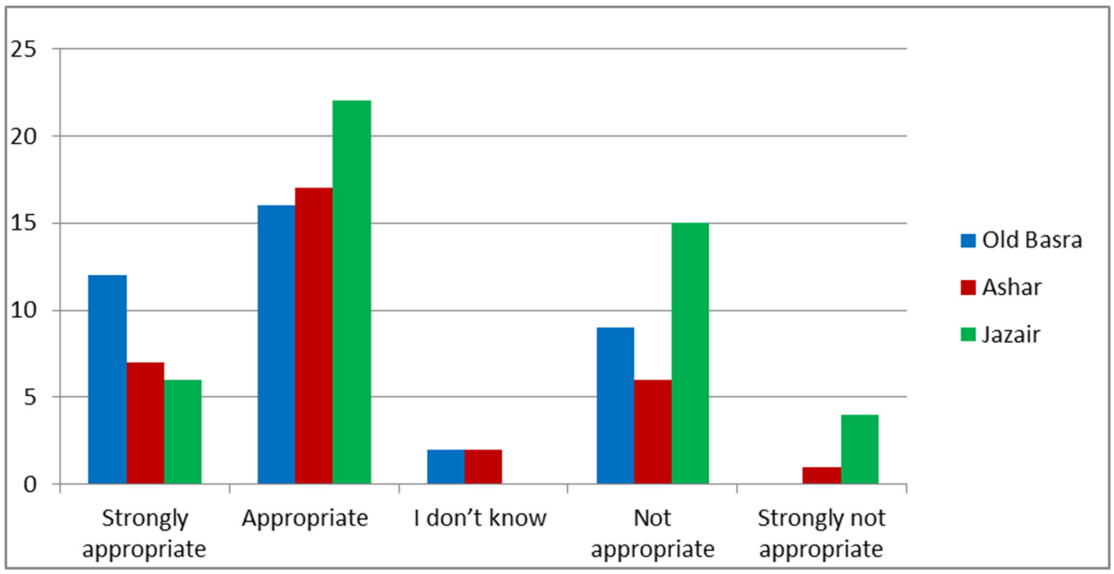


Figure 6-44: Respondent's opinions regarding the Stability of the Design Style of Neighbourhood with the local Climate Conditions

6.3.6.7 Attractiveness of Marketplaces Style

The respondents were asked about the attractiveness of the marketplaces styles in their neighbourhood. As seen in Figure 6-45, the majority of respondents in the Jazair modern neighbourhood 55% were satisfied with the market design style in their area.

On the other hand, the majority of respondents in Ashar neighbourhood 72% were not happy with the style of their neighbourhood markets, and they reported that the styles of markets are not attractive.

In the Old Basra area, the respondents who felt that the styles of the marketplace in their neighbourhoods are not attractive were most that the others who were satisfied with the design styles, as seen in Figure 6-45, the percentage of people who not satisfied was 46% while the people who were satisfied was 35%.

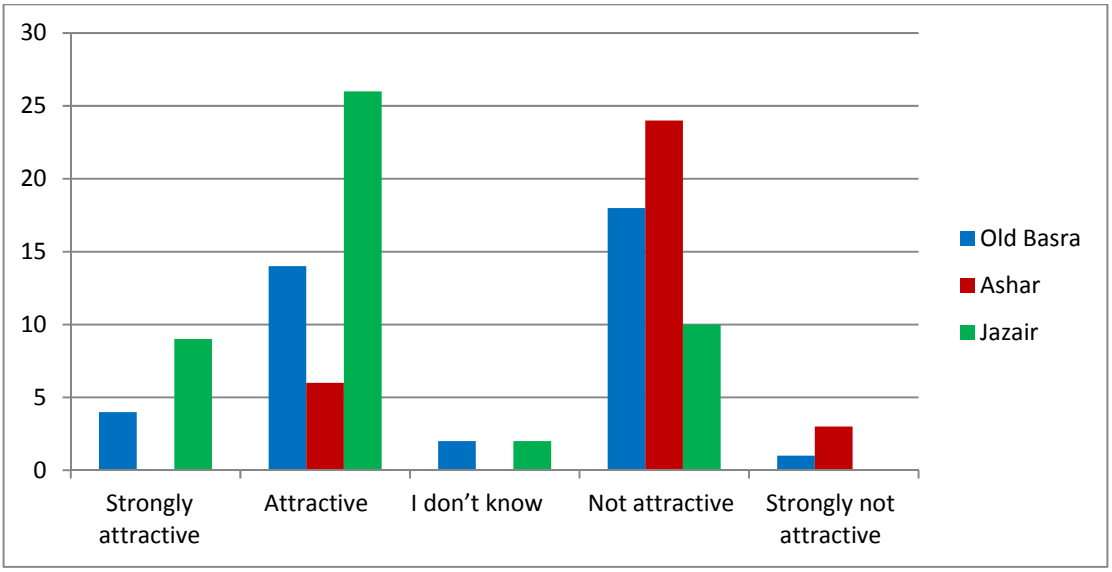


Figure 6-45: Respondents' opinions regarding the Attractiveness of Marketplaces in their Neighbourhoods

6.3.7 Part SIX: The Future for Basra Architectural Identity

6.3.7.1 Better Architecture Achievement

In order to achieve positive developments in the built environment in the future, residents in the three neighbourhoods were asked whether they thought native architects, foreign architects or a combination of both would be beneficial to future development.

The result, as in Figure 6-46, showed that the majority of respondents, 61 % in all three areas preferred a combination of native and foreign architects, whilst 25 % of the residents believed that native architects and planners are suitable for the job, The remaining 9% preferred foreign architects.

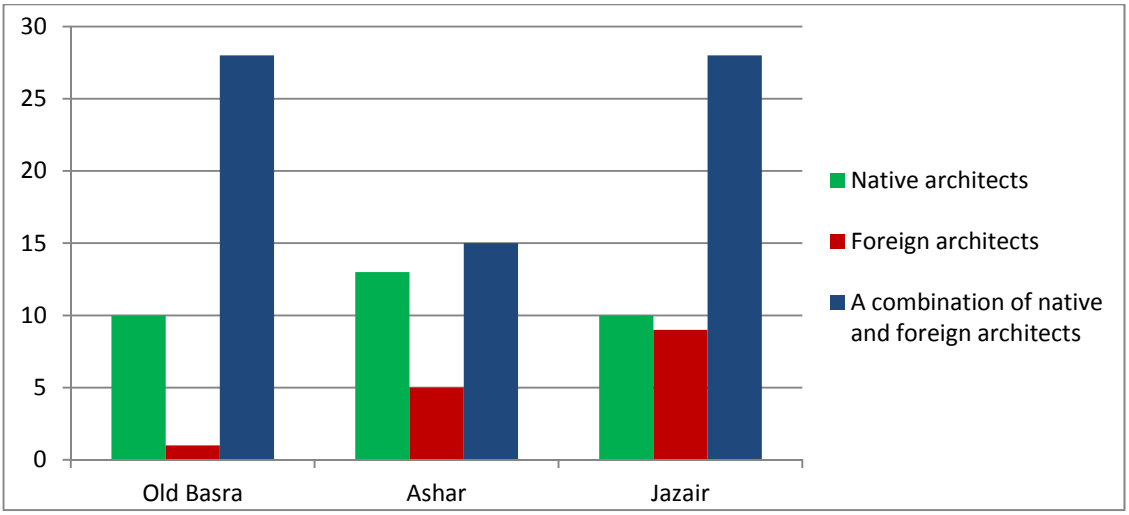


Figure 6-46: Resident's opinions regarding Better Architecture Achievement

6.3.7.2 Better Design and Development of Basra City

The residents in the three areas were asked whether the city's development should take traditional or modern architectural principles into consideration in the future.

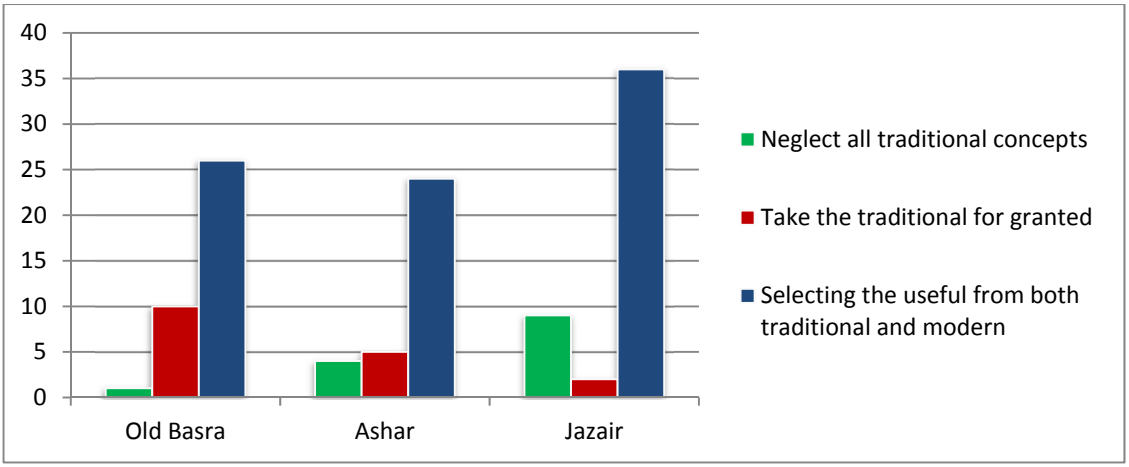


Figure 6-47: Opinions of residents regarding better future design for Basra city

The majority 78% of respondents suggested that the best solution was to adopt a combination of historical and modern principles that were relevant to the circumstances. 7% believed that fully adopting traditional ideas and principles was the best way to achieve better future development, while 12% of the respondents preferred modern principles and technology, Figure 6-47.

6.4 Comparative Analysis

Table 6-15: Site Comparison of the Three Selected Neighborhoods

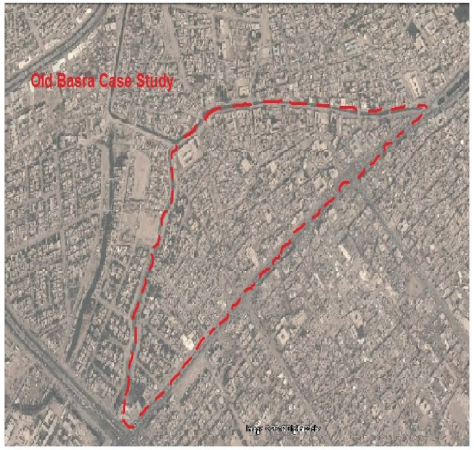
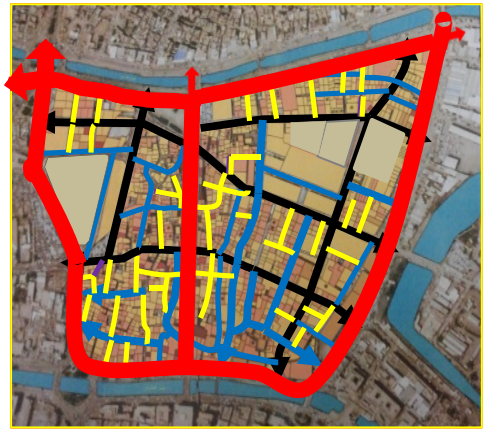
Area	Old Basra	Ashar	Jazair
			
	The Figures above illustrate the three neighbourhoods selected as cases study. The first one is traditional neighbourhood named Old Basra which is related to the Ottoman period, while the second neighbourhood has established during the British colonization for Iraq which called Ashar. The third is a modern neighbourhood called Jazair that built recently and reflect the modern architectural style.		

Table 6-16: Urban Fabric comparison of the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Urban fabric			

public semi-public semi-private private	The number of private streets and alleys within the neighbourhood of Old Basra is more elevated than in Ashar and Jazair, which indicates how the consideration for privacy was higher in the traditional architectural style. Moreover, in the case of Old Basra, the public thoroughfare only skirts the private neighborhoods, while in both the other cases there is a penetration of the public paths in the residential area.

Table 6-17 Comparison the Planning Hierarchy of the Three Selected Neighborhoods

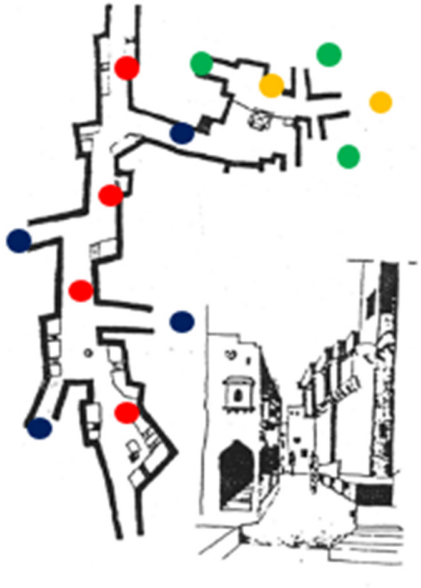
Area	Old Basra	Ashar	Jazair
Planning Hierarchy			
public semi-public semi-private private	As seen from the plans of the neighborhoods above, the urban fabric of Old Basra is clearly distinguished by a hierarchy arranging the neighbourhoods along a sequence proceeding from the public to the private, whereas in the modern neighbourhood of Jaziar, such a hierarchy is missing. However, in the case of Ashar, there is an overlapping between private, semi- private and semi-public paths		

Table 6-18 Comparison the Skyline of the Three Selected Neighborhoods:

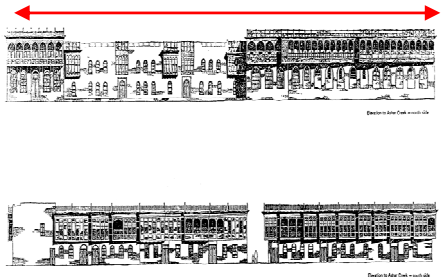
Area	Old Basra	Ashar	Jazair
Sky line			
-Harmonic -Conflicting - Gradual	The skyline of the urban landscape in the traditional neighbourhood of Old Basra is harmonic, as it can be seen in the Figure above. In the Neighbourhood of Ashar, built during the British colonial period, the skyline can be considered as gradual. On the contrary, the contrast in the skyline is stark in the modern neighborhood of Jazair. This shows how the modern architectural style does not regard the harmony of the city's skyline as a significant issue, and therefore does not give enough importance to it.		

Table 6-19: Comparison the Urban Landscape of the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Urban Landscape			
-Harmonic -Materials -Colour -Unity -Rhythm	The comparison between the three neighbourhoods analysing the urban landscape in terms of design principles such as the harmony of the materials and of the colours as well as the unity and the rhythm of the facades shows how much the three styles differ one from other. The level of harmony in the landscape of the neighbourhood of Old Basra is high: a sense of unity is achieved thanks to the similarity of the materials and the colours and a consistent rhythm of the solids and the voids on the facades. On the contrary, the landscape of the neighbourhood of Jaziar is uneven and conflictual, devoid of any harmony due to the large number of diverse materials used for the facades, generating a contrast of colours and texture with a consequent loss of harmony, as well as of unity. The urban landscape of the neighbourhood of Ashar can be considered intermediate: there is more harmony, unity and rhythm than in the landscape of Jazair, nevertheless, it is not as harmonic as that of Old Basra.		

Table 6-20: Comparison the Dominance of the Three Selected Neighborhoods

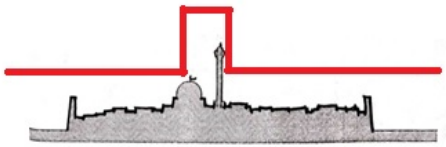
Area	Old Basra	Ashar	Jazair
Dominance			
-Size -Form -Materials	There is a clear dominance of the religious elements of the urban landscape of the traditional neighbourhood of Old Basra. Regarding the neighbourhood of Ashar, there is no clear dominance for any element. The dominance is missing since there are many architectural components which differ in terms size, form and materials. The dominance in the modern neighborhood achieved by the tower buildings because of it highest than other buildings.		

Table 6-21: Comparison the Road style of the Three Selected Neighborhoods

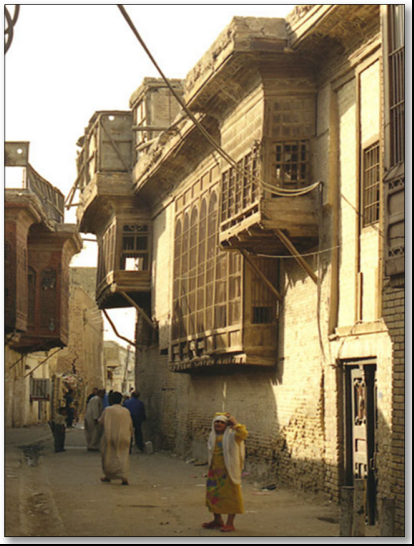
Area	Old Basra	Ashar	Jazair
Road style			
-Human Scale -Familiarity -Climate solutions -Safety - Privacy	In the traditional neighbourhood, the narrow and winding streets and alleys provide solutions apt to the climate as well as a safe and familiar environment. The level of consideration for the privacy is high, in addition, this style respects the human scale. On the contrary, in the modern neighbourhood, the road network ignores the human scale, the climate requirements and the importance of privacy. The grid-plan of wide streets and roads creates an unfamiliar and moreover unsafe environment. The road network of the Ashar neighbourhood still retains some of the merits of the traditional neighbourhood. Nevertheless, the requirements of safety and climate adaptability are missing as it was designed using the car rather than the human as a basic unit.		

Table 6-22: Comparison the Religious influence of the Three Selected Neighborhood

Area	Old Basra	Ashar	Jazair
Religious			
-focal point -roads direction -dominance	The religious factor still strongly exists in all of three neighbourhoods since the mosque represents a focal point in the urban landscape of all of the three neighbourhoods. However, in the traditional neighbourhood, the presence of the mosque is clearer because it has a physical and functional impact on the urban fabric of the neighborhood as all the alleys and the streets converge on it. In the modern neighbourhood, instead, the importance of the mosque is less relevant due to its lesser functional and visual impact on the plan and the urban landscape; many other buildings draw more attention because of their scale, materials, location and function. Consequently, the mosque exists only as a symbol or luxury element within the urban landscape.		

Table 6-23: Comparison the Climate Treatments of the Three Selected Neighborhoods

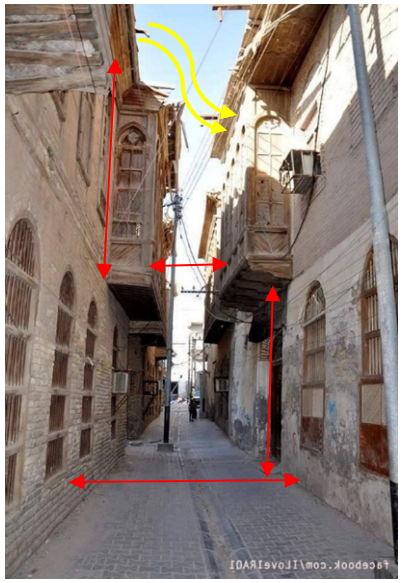
Area	Old Basra	Ashar	Jazair
Climate Treatment			
-Shaded -Narrows path -Cantilever	As it is clear from the Figures above, the traditional neighbourhood is more suited than the modern neighbourhood of Jazair in term of the local climate. The system of narrow and winding alleys with attached houses and their projecting shanasheel[s] succeeds in providing a shaded area particularly suitable for pedestrians, especially in the harsh summer weather. On the contrary, the style of the modern neighbourhood shows insufficient consideration for climate requirements. The wide streets and the detached houses, built with non-traditional materials, and the setback of houses are designed according to parameters that do not take into consideration any of the aspects of Basra's climate.		

Table 6-24: Comparison the Environmental Solutions of the Three Selected Neighborhoods

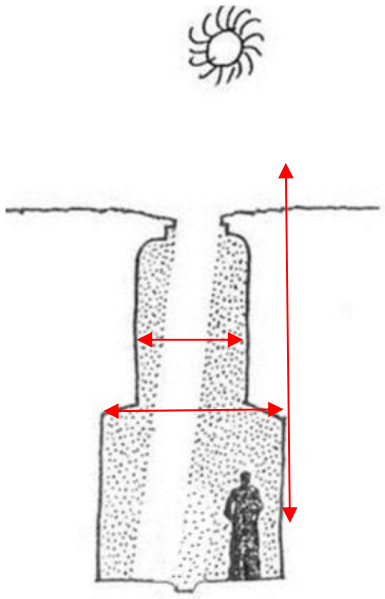
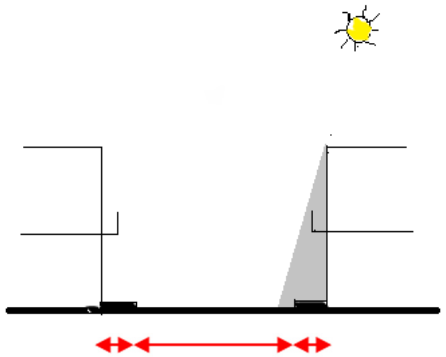
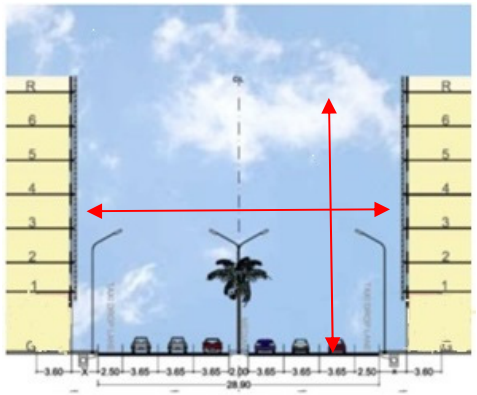
Area	Old Basra	Ashar	Jazair
Environmental Solutions			
-Diminutions of the road. -Architectural Details	The proportion between the width of the street and the height of the buildings on both of its sides is important in order to create a comfortable environment for pedestrians, particularly in the hot days of the summer when the temperature reaches 50° C. As it can be seen in the Figures above, there is a huge difference in the dimensions of the streets in all of the three neighbourhoods. The alleys of Old Basra are shaded almost all day long. While in both the other neighbourhoods there is a lack of solutions suited to the local climate. In addition, there are other architectural treatments should adopt to reduce the harsh climate impact on the pedestrians such as arcades.		

Table 6-25: Comparison the Safety within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Safety			
-Children play area -Car access -Attached houses -Urban fabric style	In the design of the residential areas, the level of safety and security constitutes a significant issue and is assessed according to a number of criteria such as the characteristics of the urban fabric layout, the distance between the houses, the vehicle circulation. The traditional area of Old Basra constitutes a safe environment due to the nature of its urban fabric whose complexity and prevents the strangers from passing through it. Cars have no access, either, as the streets are narrow and winding. Therefore, children's play areas are safe and the crime rate in extremely low. In the Ashar neighbourhood study, the layout of the neighbourhood allows the access of cars within the residential area. However, there are still some places in the neighbourhood which are safe and are hence used as children's play areas. The third neighbourhood, Jazair, has a high crime rate, by contrast, and lacks safe areas for children to play, due to the wide streets and distance between the houses.		

Table 6-26: Comparison the Social Relationships within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Social Relationships			
-Attached houses -Road style -Public space -Meeting opportunities	The social interaction among the residents in Old Basra is stronger than in the other two neighbourhoods: the traditional architectural style has many features that help to create and develop the relationships between neighbours. The attached houses, the area of house land, the narrow alleys and the existence of public spaces provide multiple opportunities for the residents to meet each other. By contrast, these opportunities are missing in the modern neighborhood of Jaziar: the large distance between the houses, the great width of the streets along with the circulation of cars creates a sense of isolation to which contributes also the presence of a private garage and a private garden within each house: the latter in particular prevents especially the children from the possibility to build relations with the others.		

Table 6-27: Comparison the Market Style within the Three Selected Neighborhoods

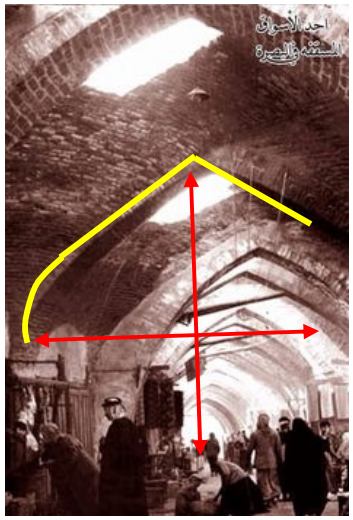
Area	Old Basra	Ashar	Jazair
Market Style			
-Locality -Scale Classification -Materials -Function	As can be seen from the Figures above, each neighbourhood study has its own style of markets which differs from the others. In the traditional neighborhood of Old Basra, for each sector there is a local market that is small in scale, features a small number of shops, has narrow paths and is usually roofed. In addition, every market is classified according to the product. Accessibility for cars is difficult. The market in Ashar is larger than the one in Old Basra, however it still developed on only one floor, covered by a truss. Accessibility for cars is limited. The modern market in the neighborhood of Jazair is large in scale and has several storeys. It is designed by means of technology, roofed with concrete and allows easy access for cars. It is convenient for shopping because all the products are available in the same market.		

Table 6-28: Comparison the School Style within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
School Style			
-Materials -design style	The Figures above clarify the differences between the design styles for the schools in the neighbourhoods of Ashar and Jazair. The form of the school in the modern neighbourhood of Jazair resembles a metal box due to the alucobund, a material that is alien to the local environment of Basra, although its use has become very common recently. The school in Ashar has two storeys and is mainly built in bricks and concrete. Old Basra, dating from the Ottoman period, has no specific design style for the building type of the school, as, before the British colonization, every educational activity was held within the mosque.		

Table 6-29: Comparison the River influence on the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Relation with the River			
-Climate solution -View	There is a strong relation between the buildings and the river in Old Basra since the buildings are located along the shoreline of the river, facing directly onto it. The traditional neighbourhood was conceived in order to benefit from the waterflow as much as possible. Rivers provide climate solutions capable of creating a comfortable environment for the residents, especially in the harsh climate of the summer. In addition, the windows facing onto the river provides an enjoyable view. In Ashar, the buildings are separated from the river by streets for cars, thus the benefits of its presence are fewer from a climatic and visual point of view.		

Table 6-30: Comparison the Landmarks within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Land Mark			
-Location -Reference -Scale -Memory	The difference between the three samples of landmarks is evident in the Figures above. As pertaining their references, those in the landmark of the traditional neighbourhood of Old Basra are local. On the contrary, the landmarks in both Ashar and Jazair follow global references, hence are alien to the local environment and perceived as non-familiar by the residents.The scale of the landmarks in all the three neighbourhoods is different: it is human in Old Basra, while it is very huge in the modern neighbourhood of Jazair. The landmark in Ashar is intermediate in scale if compared with the other two: it is neither huge nor human. In addition, there is a difference in the materials used to build them: while local materials are used in the landmark of Old Basra, in both the neighbourhoods of Jazair and Ashar, the landmarks are built by means of alien materials such as steel and alucobond. Landmarks should connect with the memory of the residents.		

Table 6-31: Comparison the Plan of House within the Three Selected Neighborhoods

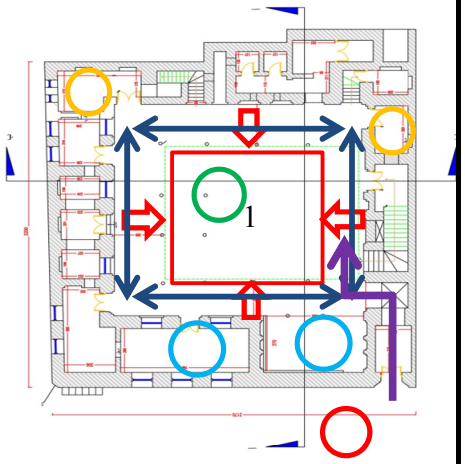
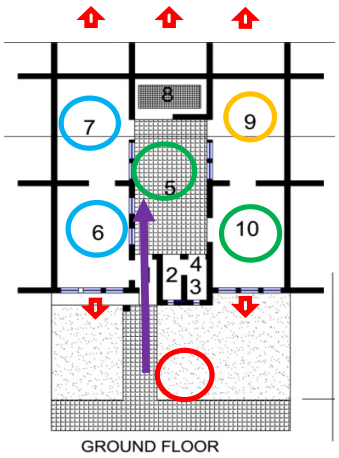
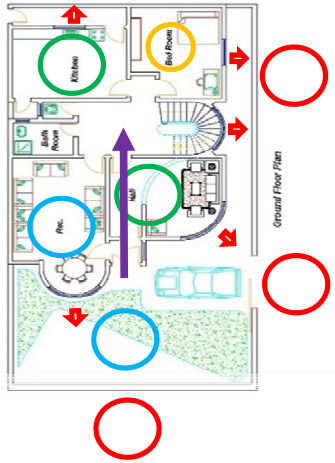
Area	Old Basra	Ashar	Jazair
House Plan			
-Space's hierarchy -Privacy -Space's Orientation -Entrance	As can be seen in the Figures above, in the traditional house-plan the spaces are arranged according to a clear hierarchy proceeding from the public to the private.In the house in Ashar, by contrast, there is an overlapping of the semi-public, semi-private and private spaces, which is even more accentuated in the modern house in Jazair, wherein the private and public spaces are very close to each other. The spaces of the traditional house are oriented towards the interior courtyard, whilst the spaces of the house in Ashar are oriented towards the front garden and the rear garden, which are, respectively, public and semi-public. In the neighbourhood of the house in Jazair, the private, semi-private and semipublic spaces are oriented toward the same public space. The entrance of the traditional house is an indirect, while the entrance of both other neighbourhoods are direct toward the semi-private space. Accordingly, the privacy in the traditional house is achieved more than in the other two houses. That is due to the hierarchy and the orientation of the spaces, in addition to the direction of the entrance.		

Table 6-32: Comparison the House Design Style within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
House Design Style			
-materials -window And door -privacy	The comparison between the facades of the three houses above indicates that both the houses in the traditional neighbourhood of Old Basra and in the British-period neighbourhood of Ashar are built with the same local materials such as bricks and wood. In the neighbourhood of Ashar, there are also new materials such as iron, which is used for the external fence, the handrail and to cover the windows. By contrast, the modern house in the neighbourhood of Jazair is made of materials such as white stone and marble, historically alien to the local environment.		

Table 6-33: Comparison the Windows Style within the Three Selected Neighborhoods

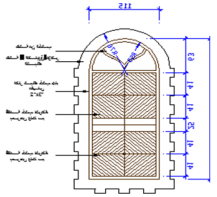
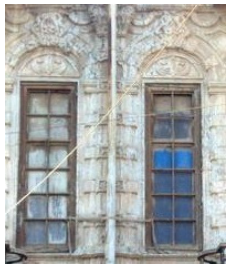
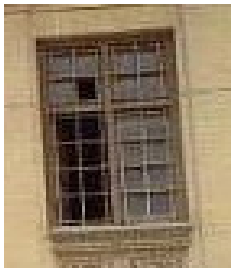
Area	Old Basra	Ashar	Jazair
Window Style	  	 	
-size and dimensions -materials -proportion -climate treatment -security	As clearly seen, the style of the windows is totally different in all the three samples. The houses in Old Basra house had shanasheels which are wooden windows providing the residents with a high level of privacy and preventing the sunlight to enter directly inside the space. In Ashar, the windows are still small in size as an environmental requirement, made of wood, as well as iron as frame and protection. The size of the windows in the modern house is large and takes a high percentage of the façade, which is made of iron or aluminum, hence is not suitable for the local climate. In addition, the issue of privacy issue is not taken into account.		

Table 6-34: Comparison the Architectural Details within the Three Selected Neighborhoods

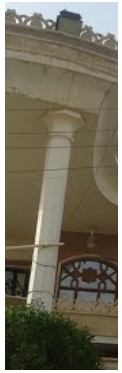
Area	Old Basra	Ashar	Jazair
Architectural Details	  	  	  
-Door style -Columns -Materials - Decoration -Connecting between column and ceiling	The main door in modern house has huge size which reach 6m height, made from wood or iron with glass. While its height in traditional house about 3m with wooden decorative. In Ashar, the main door is a wooden and simple without decorative or glass, height about 2m.The wooden column in Old Basra house has used in arcade of the interior courtyard, with capital to connect with ceiling. In Ashar brick column has used in facade epically as indication for the entrance, others may use in balcony on the first floor. Bricks capital used at the upper end of the column. Huge column used in facade of modern house with height about 6m, made of stone or concrete, capital not always used for connection with ceiling.		

Table 6-35: Comparison the Courtyard within the Three Selected Neighborhoods

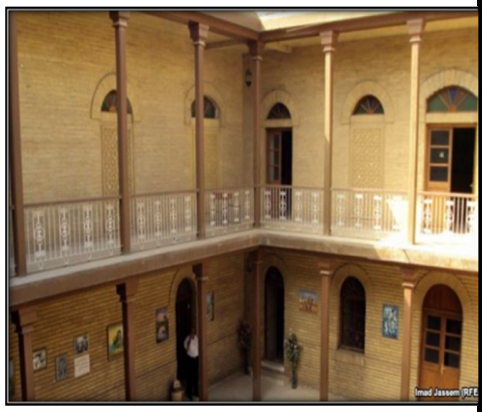
Area	Old Basra	Ashar	Jazair
Courtyard			
-location of courtyard - indoor opening -arcade - Climate -privacy	The internal courtyard is an essential element of the traditional house, as all the spaces of the house are oriented towards it. The courtyard provides a comfortable environment for the residents in terms of climatic solutions, as well as high level of privacy. Both the houses of the neighbourhoods of Ashar and Jazair do not feature a courtyard, which is replaced by the front and the rear gardens, towards which the spaces of the houses are consequently oriented. Some modern public buildings have a courtyard but only as a symbolic element shorn of any actual function.		

Table 6-36: Comparison the House Structure within the Three Selected Neighborhoods

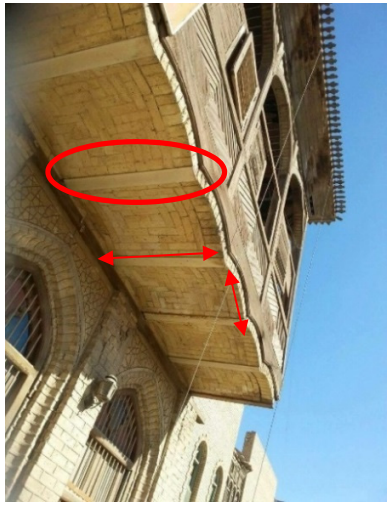
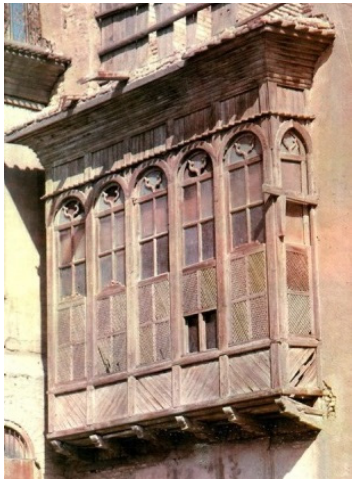
Area	Old Basra	Ashar	Jazair
Structure of The Houses			
-Materials -Craftsmen -Technology	The structure of the traditional house relies on wood for the roofs and bricks for the walls and is built by local craftsmen according to their practical experience. The structure of the house in Ashar has walls made of bricks and roofs made of bricks and iron. The modern house has walls made of bricks along with concrete columns and roofs made of a concrete. Technology rather than craftsmanship is adopted for its structure.		

Table 6-37: Comparison the Balcony Design Style within the Three Selected Neighborhoods

Area	Old Basra	Ashar	Jazair
Balcony Design Style			
-privacy -materials -climate	As seen above in the samples of three balconies, the traditional one, made of wood and called shanasheel, provides a high level of privacy for the family as it allows a view from the inside towards the outside while it prevents viewing from the outside towards the inside. In addition, it protects the space from the sun and the harsh weather. By contrast, both the other neighbourhoods, in Ashar and Jazair, do not provide privacy, although the modern balcony to a lesser extent than the one in Ashar. Moreover, the balcony in Ashar, built in concrete and with an iron handrail, does not take into consideration the local climate; neither does the balcony of the modern house in Jazair, built in concrete and stone. It also must be noticed that, in general, the balconies of the houses of the modern neighbourhood are only used as decorative elements for the facade.		

6.5 Summary

The responses of the experts and the residents obtained from the interviews and the questionnaire survey are analysed in this chapter.

The analysis of the interviews provided a wide vision in regard to the advantages and disadvantages of both traditional and contemporary architecture in Basra. The results indicated that the identity of the city has been destructed due to many reasons that have been illustrated in this chapter in order to deal with them in the future. The analysis of the responses of the residents clarified their satisfaction and dissatisfaction regarding the neighbourhoods and the in which houses they lives.

The findings from the comparative architectural analysis regarding the field observation clearly indicated that a transformation occurred during the past century in Basra's architectural identity. Many traditional local features have disappeared, while new unfamiliar features and elements have recently been adopted.

Based on the analysis of the data, a set of guidelines for the future identity was developed and will be presented in the next chapter, which illustrates the findings. These guidelines are considered to provide suggestions to reflect on the features of local identity in the future design of city in terms of social and climatic aspects.

Chapter 7: FINDINGS AND DISCUSSION

7.1 Introduction

The chapter illustrates the main findings obtained from the reviewing of the relative literature in regard to the concept of identity in built environment in general, and in particular, the identity in Iraqi local environment. In addition, it presents the findings of empirical study which conducted with experts through the interviews and with the residents through the questionnaire survey.

The chapter then presents the proposed guidelines that developed based on the literature and the empirical study. Moreover, it clarifies the validation process of the proposed guidelines and describes in detail the comments and suggestions of the focus group regarding the guidelines that proposed.

7.2 The Main Findings

As mentioned in chapter one, the aim of this study is to maintain the architectural identity while enabling modernization of Iraqi cities with special reference to the city of Basra. A wide range of literature related to the topic of the research such as books and articles has provided the main source of secondary data, in addition to archival and government documents such as master plans and report. According to that, the study discussed identity in the Iraqi architecture and analysed both the traditional and the contemporary identity, taking into consideration the factors that are influential for the identity formation process. The theoretical review of the literature at the beginning of this research involved the clarification of the concept of identity (as in section 2.2), its main dimensions (section 2.5) and its levels (section 2.6), as well as the formation process of identity in addition to its transformations in the built environment (as in section 2.8). The main issue that resulted from the literature that there is no specific definition for identity, which is due to the fact that, being an ambiguous and slippery term, there are no clear boundaries for it, hence in order to clarify its meaning it needs to be associated or puts within a certain

frame such as a place or so on. However, in this research, identity is defined as distinguish from the others in order to reach a uniqueness that is achieved according to clarifying the similarity and the difference than them.

The empirical study has investigated the change and transformation that Basra's identity has undergone during the 20th century. The investigation has been carried out selecting three different neighbourhoods within Basra city according to the period in which they have been built and their architectural style. The first neighbourhood is a traditional neighbourhood which relates to the Ottoman period, the second neighbourhood represents the British colonial style, while the third is a modern neighbourhood. The differences between the architectural styles of the three neighbourhoods represent the transformation stages which occurred in the city affecting its identity (as in section 6.4). A questionnaire survey with the residents of the three neighbourhoods and interviews with experts have been carried out in order to explore their evaluations and opinions in regard to the identity of their areas.

Primary data have been gathered from professional architects through semi-structured interviews. A survey questionnaire has also been conducted to collect data from the householders of the three neighbourhoods. Other data have been obtained via direct observation using photographs and empirical information collected from the three neighbourhoods between May and July 2015. 12 experts whose activity is concerned with Basra's city's identity have been chosen for the semi-structured interviews. The opinions of the professionals have been sought in terms of the positive and negative aspects of both traditional and contemporary identity, as well as the influential factors on the formation of identity and its transformation, and the professional suggestions in terms of the future of the city's identity. In addition, 119 from the householders who live in the three neighbourhoods responded to the questionnaire, which includes personal information about the residents, characteristics of both the traditional and the contemporary identity in terms of social relationships, privacy, safety and security, familiarity, and, at the same, discusses global impact, suitability for climate and residents, opinions concerning the future of the city's identity. Thus, the relation to others is bedrock in identity issue, as it is determined according to them.

As mentioned in literature, there are two types of identity; individual and group, as mentioned by Lewins (1978), the subjective or individual basis that support the emotion could be provided through the effective links, which are represented by the individual identity, while the group identity represents the quality of connection which links a group via a set of interests (see section 2.6.2). Furthermore, there are two important factors play a significant role in the formation of identity, which are time and place, for (Popescu, 2006) Any identity should have three dimensions: time, place and culture; the fourth dimension would change. Time and space are the main referents used to generate identity images in architecture (see section 2.4.1.1), therefore, the identity is always dynamic as it mentioned by (Agnew,1981) "Identity is a dynamic phenomenon and when expressed in everyday life, as for instance through action premised upon a meaning given to home ownership, it should not be seen as a static property of individuals but as product of intentionality in a given and changing social context" (section 2.6).

The finding of the study illustrated that there are numerous factors played a key role in the formation of the traditional identity in Basra's built environment, and that they have affected the identity transformation process still under way and started a long time ago (see section 6.3.6). According to the literature review (sections 2.3- 2.5.1- 2.5.3 – 3.2 – 3.2.2 – 3.2.4 – 3.2.5) and empirical study (sections 6.3.5.7 – 6.3.6.7 – 6.3.5.1 – 6.3.5.5 - 6.3.5.9 – 6.3.5.10 - 6.3.5.6 – 6.3.6.6 – 6.3.5.8 – 6.3.6.7 -6.2.4.1), six components have emerged, which can be described as dimensions, more specifically: social, cultural, environmental, religious, economic and political dimensions. Each of them includes a number of key factors that can be interpreted according to a set of criteria, as clarified in Figure 7-1.

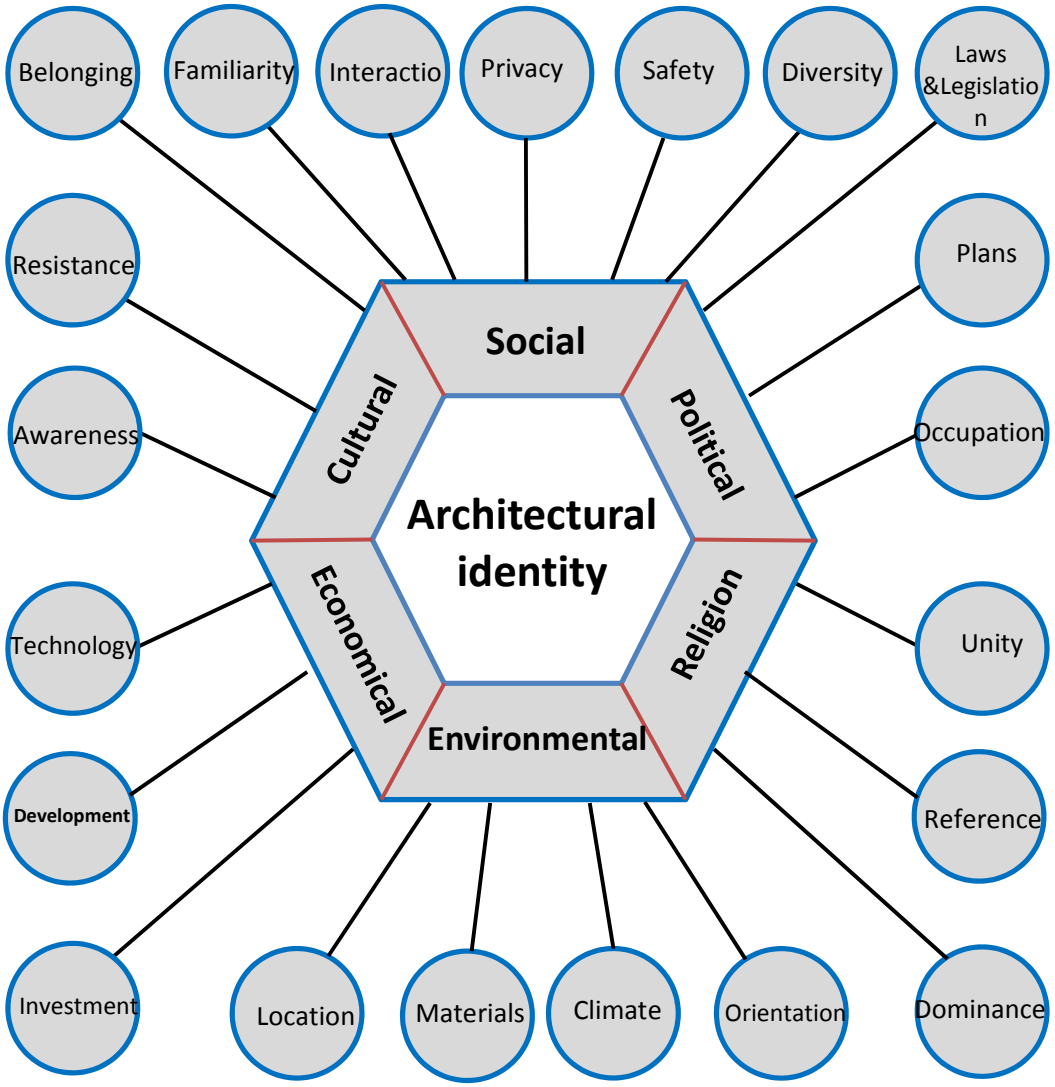


Figure 7-1: The Main Dimensions and the Key Factors Influenced Identity

As mentioned in the research objectives (section 1.5) and according to the results of field work in chapter five, this research focuses on two aspects: a social aspect and an environmental aspect. Consequently, in regard to the social dimension, the results illustrated the existence of five factors, which are: privacy, safety, interaction, familiarity and diversity, as shown in Table 7-1. (see sections 6.3.6.1 – 6.3.6.2 – 6.3.6.3 – 6.3.6.4 – 6.3.6.5 – 6.3.6.6) as well as (section 6.4).

Table 7-1: The Factors and Criteria Categorized Under the Social Dimension

	Dimension	Factor	Criteria
1	**Social**	**privacy**	Planning hierarchy Interior courtyard Indirect entrance Shanasheel Solid external wall Treatments of facade
		Safety	Interior courtyard Houses attached Organic alleys
		Interaction	Planning layout Open space Houses land area Houses attached
		Familiarity	Local references Local materials Landmark Human scale
		Diversity	Materials References Scale

Privacy is essential factor in developing the identity of the built environment. The findings illustrate that the privacy is significant issue and a main concern to respondents in Basra city, thus, its play a key role in the daily lifestyle of Iraqi society. The findings indicate that the traditional architectural style was concerned with providing a high level of privacy at both the urban and the architectural level. In this regard, Al-Kaissi (1983) has pointed out, privacy and security must be regarded as significant factors in the

formation of the buildings and the neighbourhoods in the traditional residential areas in Iraq, and, furthermore, in the organisation of the network of streets and alleys. Visual privacy, a crucial and highly valued feature of Iraqi culture was addressed within the traditional houses, as well as in the alleys of neighbourhoods, and clearly influenced the city's architecture in order to satisfy the resident's needs, Al-Zubaidi (2007) has summarised the main features which played a key role to achieve privacy in the traditional house as: the hierarchy at both the level of the city planning or inside the house, the unity of the neighbourhood, the winding and narrow streets and alleys, the location and form of doors and windows, in addition to the features of the houses facades such as the solid and high external walls and other specific elements such louvers and screens. However, visual privacy is entirely missing in Basra's contemporary architectural style. Although Iraq has endured rapid and significant changes, some social values, particularly privacy remain well rooted into society. The most important from among them is the value of privacy, which clearly influenced the Iraqi architecture (as mentioned in sections 3.4.3.1 – 6.2.3.1 – 6.2.4.1 – 6.3.3.3 – 6.3.5.5 – 6.3.6.1).

In this regard, the significance and value of privacy in Iraqi society can be demonstrated by the monument illustrated in Figure 7-2, which was built in Basra in 2012 to immortalise the story of a lady who was travelling by car with her family along a busy street, when suddenly an explosion occurred. In a few instants, fire engulfed all of the cars on the street, including that in which the lady was. In order to save themselves, drivers and passengers abandoned their vehicles, but the lady remained calmly inside the car and refused to leave it, despite many requests from others to flee. The reason behind her apparently strange behaviour was that the fire had burned part of her clothes, forcing her to remove them, and therefore, she preferred to die burning within the car rather than to go out in the street naked.

Figure 7-2: The Power of Privacy In Basra Society

The factor of privacy can be measured in Basra's environment through a number of criteria such as: the hierarchy of the spaces from public to private in the planning of both the house and the neighbourhood (as in sections 3.4.2.3 – 3.2.5.2 – 6.3.3.3 – 6.2.5 – 6.2.3.1), the presence of a courtyard both within the house and the neighbourhood (see sections 4.7.1 - 4.9 -4.5 – 3.4.3) , the layout of the main entrance of the house in terms of its relation to the other spaces (see sections 3.2.5.2.- 3.4.3.1 – 4.5 – 4.7.1 -6.3.3.2 – 6.3.3.3 – 6.3.5.2 – 6.3.2), the presence of shanashils in the facades of the houses (as mentioned in sections 3.4.3 – 3.4.3.1 – 4.5 – 4.2.1 – 6.2.3.1 – 6.2.4.1 – 6.2.4.2 – 6.3.3.3 – 6.3.5.5 – 6.3.6.1 – 6.3.6.5), the solid to void ratio in the external walls of the house, and the treatments of the details of the facades (see sections 4.5 – 4.7.1 – 3.4.3.1 – 3.4.3.2 6.2.4.2 – 6.3.3.3 – 6.3.5.5 – 6.3.5.6).

The need for safety is an important desire for human beings. Keller (1968) stated that the lack of safety within the neighbourhood is a consequence of a bad planning of the street network as heavy traffic prevents residents, the children in particular, from having contacts and building relationships with each other. The findings showed that the sense of safety reaches a high level in the traditional area whilst it is at the lowest level in modern area, which reveals a scarce concern for the safety issues in the planning of both its houses and its streets.

The importance of the security aspect has clearly emerged after 2003, as most of the security problems and the explosions have occurred within the modern areas of the city, while they have seldom happened in the traditional neighbourhoods. This is due to the fact that the residents of the modern neighbourhoods do not feel any sense of belonging to their environment nor do they feel responsible for the surrounding space. On the contrary, in the traditional environment, there is a strong sense of belonging and a high level of the sense of responsibility for the space, which can prevent the access of strangers to the area, and therefore, prevent the occurrence of security incidents such as bombings, assassinations or kidnappings, which have become common in Iraq, in general, and in the city of Basra, in particular, over the past ten years, (as seen in sections 6.2.3.1 – 6.3.5.10 – 6.3.6.4).

For Shawesh (2000), to achieve a sense of safety in the physical environment means to build an acceptable and suitable relation between social and physical contexts which enhances a sense of belonging. The criteria to achieve the safety in a local environment of Basra include; the existence of interior courtyard whether within the houses or in an urban level as the courtyard between a set of houses which can be used as a safe environment for children play area (sections 4.7.1 - 4.9 -4.5 – 3.4.3). The arrangement of the houses according to a mutual relationship determines a level of safety: attached houses create a sense of safety for the neighbours (sections 3.4.2.1 – 3.4.2.2 – 3.4.2.3 – 6.3.5.2 -6.3.5.10), in addition to the safety already provided by the typical features of the organic fabric such as its alleys with their particular width (as mentioned in sections 3.4.2.2 – 3.4.2.3 – 6.3.5.2).

In terms of social interaction, there is a set of criteria that can enhance this interaction such as: the layout of the neighbourhood, the presence and the number of open spaces within the neighbourhood. In addition, the area of land plot on of house; small area of house land creates a high level of interaction between the neighbours, which is increased even more if the houses are attached. According to Douglas (1997), Identity provides the foundation for option making, supports a social interaction, coherence and agreement, while simplifying relationships with the other in addition to highlighting sameness. (see

sections 2.5.1 – 3.4.1.3 – 4.5 – 3.4.3 – 4.7.1 – 4.7.2 – 6.2.3.1 – 6.3.5.1 – 6.3.5.9 – 6.3.3.3 – 6.3.6.3 – 6.3.4.2).

Regarding the social interaction, the findings illustrated that most of the residents and the experts reckon that the traditional architectural style provides stronger relationships between the neighbours, which is due to some particular features of this style such as the narrow alleys, the attached houses, a land area of houses and the open spaces, all of which enhance the interaction between the residents since they provide more opportunities for them to meet each other. By contrast, most of the characteristics of the modern architectural style, such as the wide streets, the large and detached houses, the presence of a garden and garage within each house, have all a negative impact on the social interaction and do not support the residents to build relationships with each other. (sections 6.2.3.1 – 6.3.5.1 – 6.3.5.9 – 6.3.4.1 – 6.2.2.1).

The main criteria affecting diversity in the local environment are; the number and kinds of materials used, the references of the architectural elements and the scale of buildings that form the built environment, (see sections 2.4.1.1 – 2.4.2.1 – 2.4.3 – 3.3.1 – 3.4.1 – 4.4 – 4.5 – 6.2.2.3)

In terms of the environmental dimension, the findings identified four factors; climate, material, orientation and location, Table 7-2. Each of these factors can be interpreted according to a set of criteria (as seen in sections 2.4.1.1 – 2.4.2.1 – 3.3.1 – 3.2.1 – 3.2.2 - 3.4 - 4.5 – 6.2.2.3 – 6.2.4 – 6.3.3.3).

Six criteria affected the climate factor in Basra's environment. The interior courtyard within the house plays a significant role in creating a comfortable environment, as mentioned by (Al-Zubaidi, 2007) that the courtyard was used not only for the houses but also for other building types such as castles and palaces as it was appropriate for the hot, harsh local climate (see section 3.4.3 – 6.2.3.1 – 6.3.4.2). The use of shanasheel in the external facade is important to protect the inner space from the effects of the weather such as the sun-rays (section 6.3.3.3). The thick external walls of the house serve as insulating elements between the inside and the outside, providing a good protection from the hot summer weather (see sections 4.7.1 – 3.4.3 – 6.2.3.1). Furthermore, the heat

isolation increases when the houses are attached to each other, which reduces the number of external walls exposed to direct sun. The organic fabric made of winding alleys is to be regarded as a successful solution for Basra's hot local climate, as the tortuosity of the alleys provides a manipulation of the wind movement and consequent air circulation, and creates an appropriate environment for the pedestrians, as the alleys are always shaded (as mentioned in sections 3.4.2.2 – 4.7.1 – 3.4.2 – 6.2.4.1 – 6.3.5.2).

Table 7-2: The Factors and Criteria Categorized Under the Environmental Dimension

	Dimension	Factor	Criteria
2	Environmental	**Climate**	Attached houses Organic alleys Interior courtyard Shanasheel Thick external walls Narrow shaded streets
		Material	Isolation Craftsmen Locally
		Orientation	Indoor orientation of houses Winding alleys
		Topography	Rivers Location

In regard to the climate, the findings show that the traditional architectural style is regarded as more appropriate for the local climate of the city than the contemporary style. The small size of the external windows and the thick external walls of the old houses create a high resistance to the heat, in this regard, Jaber (1996) has stated that Basra presented a unique traditional urban fabric, which consisted of clusters of adjacent houses oriented towards their interior courtyards, resulting in an organic layout of winding, narrow alleys, formed according to the location of the houses and the relationships

between them. Such an arrangement aimed at providing solutions to the climate and other social requirements of the local society. On the contrary, the contemporary architecture style is inappropriate for the local climate because new materials such as concrete, steel, Alucobond and stones are less effective in this regard. In addition, the windows in the facades are extremely large, as the excessive area of the glass allows the sun radiation to access the internal space. Thus, there is a need to benefit from the characteristics of the local traditional architecture such as the function of the interior courtyard, the layout of the alleys, and also the specifications of the local materials, since results of studies carried out have indicated that the new materials used in contemporary buildings do not create a comfortable environment for the residents, so that technology must be adopted to reduce the impact of the harsh climate, particularly in the summer, (as mentioned in sections 2.5.3 – 3.2.2 – 6.3.4.2 - 6.3.5.6 – 6.3.6.6).

The selection of the materials in Basra's environment depends on three criteria, the first of which is the degree of insulation of a material, which, since Basra's weather is very hot during most of the days of the year, is to be considered as an important feature to protect the space from the harsh local climate. Thus, the materials successfully befitting Basra's environment are the local ones due to their suitability for the local climate, as mentioned by (Warren & Fathi, 1982), most of the materials used in the traditional Iraqi architecture were local, such as the mud brick, which was the most common material of which buildings were made. Then, in the early twentieth century, the burned brick began to be used as an alternative to the mud brick. Another criterion for the choice of the material is the presence of skilled craftsmen with a long-term solid experience and knowledge regarding the processing of these materials (see sections 3.4.3.2 – 6.2.4.1 – 6.2.4.2 – 6.3.3.3 – 6.3.4.2).

In regard to the building materials, the majority of both the interviewees and the residents were dissatisfied with the materials used in Basra's contemporary buildings, such as concrete, Alucobond, steel and stone. The main reason mentioned by them is that these new materials are not suitable for the local climate, nor are they familiar with the local environment, which causes a disconnection with the past, in addition to increasing the costs due to the fact that they are imported from abroad, and moreover, some of these

materials need skilled workers of whom there is great shortage in the country. (see sections 6.2.2.2. – 6.2.2.3 – 6.2.2.4 – 6.2.4.2 – 6.3.4.2).

The third factor in the environmental dimension is the orientation, which is interpreted according to two criteria. The first, at both the architectural and urban level, is the indoor orientation of the spaces, arranged around the courtyard, as the windows of the spaces of the house face onto the interior courtyard, and, at an urban level, the arrangement of a set of houses around a central courtyard or open space, according to Al-Zubaidi (2007) all the rooms within the house are oriented towards the inner-courtyard, so as to provide the family with a private space to carry out their activities without being disturbed by the others. The second criterion is the winding alleys, which design according to the climate requirements, (as mentioned in sections 3.4.2.1 -3.4.2.3 -3.4.3 – 4.5 – 4.7 – 6.2.3.1 – 6.3.5.2).

Topography is the fourth factor in the environmental dimension, including two criteria. The first is the presence of the rivers which plays a key role in Basra's environment in terms of mitigation of the harsh climate and also as a visual reference for the spaces, in addition to the impact that it exerted on the planning of the city. The second criterion is Basra's location and its natural features, as it is close to the Gulf to the south, the desert to the west and the marshes to the north, (as clarified in sections 3.2.1 – 4.2 – 4.5 – 4.8 - 4.9 – 6.2.4.1 – 6.3.6.5).

The interaction between people and their built environment creates a sense of place (as clarified in section 2.5.2) which enhances the identity, in this regard, Rapoport (1977), pointed out, that the changes in the shape of the cities can lead to significant changes in behaviour, either positively, such as enhancing psychological comfort that enhances interaction or may be inhibiting for activities. The results showed that there is a definite connection between the level of social interaction and the duration of the living in the neighbourhood of the residents (section 6.3.2.3): the interaction between the residents' increases when the living period is longer. In this regard, it must be noted that most of the residents of the traditional neighbourhood have lived in it for a long time, since it established, and most of them have been born in the same place where they still live. Therefore, the findings indicated that the relationships are strong in the traditional

neighbourhood and weak in the modern areas. For (Mahgoub, 1997), the environments that were produced according to the traditional style were respectful of the human needs and useful for the creation of social relationships.

Consequently, the results indicate that most of the elderly people feel a strong attachment to the place that they live in, this related to their emotions regarding the environment, which is created according to the sense of the place that they feel it. On the other hand, this emotional attachment is completely missing for the young generation (see sections 2.5.2 – 2.5.2.1 – 6.3.2.2 – 6.3.5.1 – 6.3.5.2 – 6.3.5.3); this may be related to the memory of the place that the older people still own it regarding the local environment since they associate these places with occasions and events for them. In this regard, the results mentioned that most of the older people were able to identify a building or place connects them to the past, while this ability was not available for the younger because their memory is limited. Thus, they will not have any concern for the changes may happen in future for their built environment. In this regard, Akkurt (2012) stated that transformation projects that aim at consolidating, reorganising and revitalising the historic fabric usually face problems concerning the weakening of collective memory and the annihilation of place identity.

Both the natural and the physical components of the city can be regarded as the main source for the creation of the sense of identity (section 2.4.2): on one hand, there are natural components such as topography and the location features (as in section 2.4.3), on the other hand, there are physical components like houses, streets, open spaces, markets and mosques (see section 3.4.1), which are created by people according to their values, habits, norms and beliefs. Therefore, as the built environment is a result of the relationships between the aforementioned physical elements which are a result of the individual values, beliefs and custom, identity is not fixed, but rather dynamic, as pointed out by (Czumalo, 2012) Urban identity is a dynamic fact taking its shape from and changing under the effects of the natural and artificial physical elements of the city and the social factors canalising these elements, (section 2.6.1): it is a process liable to undergo changes and transformations. In this regard, any change that may occur for these elements or in relationships between them will lead to a change in the identity of the city,

as Douglas (1997) claims that “the social and political change, particularly if it has cumulated over protracted periods of time, will lead to identity change”.

The Iraqi traditional architecture has been influenced by the Islamic principles, Al-Sheliby (2015) pointed out that over the centuries, the principles of Islam have been integrated by people within the social aspects, which resulted in subsequent, further values and rules to construct their built environment (see section 3.2.5), which have always focused on a build and maintain Muslim society. Factors such as privacy (section 3.4.3.1), safety and social interaction have reflected on the traditional built environment tangibly through architectural addressing such as the presence of a courtyard both in the houses and the neighbourhood, According to Al-Kaissi (1983), privacy and security must be regarded as significant factors in the formation of the buildings and the neighbourhoods in the traditional residential areas in Iraq, and, furthermore, in the organisation of the network of streets and alleys (see section 3.4.3), the sizes and shapes of the windows as well as their positions, the width and the shape of the streets (section 3.4.2.1), and the hierarchy (section 3.4.2.3) of the urban fabric proceeding from the private to the public.

The evidence from the empirical study showed that the majority of the residents and the interviewees evaluate the traditional architecture as more appropriate for the local society in terms of social and environmental aspects, which agree with what mentioned by (Warren, 1982) that the traditional Iraqi house is characterised by distinctive features that are appropriate to the local climate and the social aspects, in so representing an ideal solution providing the Iraqi family with an indoor environment of absolute privacy. The majority of the residents were satisfied with the traditional architecture style in terms of privacy, social relationships, safety regarding the traffic, low rate of thefts and presence of children's play areas (see sections 6.2.3 – 6.2.4.1 – 6.3.3 – 6.3.5.5 – 6.3.5.9 – 6.3.5.10 – 6.3.6.1 – 6.3.6.2 – 6.3.6.4). By contrast, most residents were dissatisfied with the contemporary architectural style in this regard (as in sections 6.3.4 – 6.2.2).

The introduction of motorised vehicles on a large scale in the local environment has negatively influenced the identity of the city as cars and other vehicles require wide and straight streets, as stated by (Peery, 2009) that the grid network planning produced wide

streets and led to the establishment of new residential areas that did not consider families or tribe as essential units, resulting in negative impacts on the social lives of the local Iraqi society, (section 3.5), thus the establishing of such streets within the traditional city led to the rupture of the harmony inherent to the traditional urban fabric, creating a separation between its parts. Adopting the car as an essential unit in the planning of the city affected the movement of the pedestrians because the shading of wide streets, which is fundamental in Iraqi environment due to the heat, is a difficult process, and, in addition, the circulation of motorised vehicles within the city represents a reduction of safety for pedestrians (see section 3.5).

These changes have clashed with the cultural values of the local society and showed the conflict internal to the Iraqi society between a conservative sector demanding an utmost preservation of the traditional identity and an innovative sector opposing tradition and supporting the concept of modernisation with all that it entailed (as in section 3.2.4). The absence of legislation and regulations overseeing and guiding the development of the city has played a significant role in the deterioration of the city's identity, paving the way for the transformations and changes that resulted in the formation of a hybrid environment (see section 4.10).

Technology and the global architectural concepts adopted by the architects in their designs due to the economic development have had a significant impact on the transformation of identity (as clarified in section 2.9.2). In this regard, Al-Asadi (1996) has mentioned that the global architectural practice had created new trends based on the interconnection between the pre-design or the attractiveness of the pre-planning and the characteristics and knowledge of each architect, to the extent that gathering the difference between them became very complex or even impossible due to the difficulty of knowing which one has affected the other: the characteristic of the architect or the attractiveness of the pre-planning.

The situation in Iraq after 2003 has shown the significance of the environmental issue since it clarified the fall of reliance on technology as a tool capable of solving the environmental problems. The damages caused to the electric power stations during the past wars led to the current lack of electricity supply and the consequent rationing by

means of a switch off of the electric power for long hours during the day, as not enough electricity can be generated any longer, especially during the harsh summer. The supplying of electricity for no more than 4 hours per day led the residents of the modern neighbourhoods to rampages, as these shortages have a much tougher impact on modern houses, whose design and construction ignored systematically the climatic aspect, both in terms of building materials and relationships between the spaces within the scheme. By contrast, climatic treatments were taken into consideration in the traditional neighbourhood, both in at the level of the houses and the streets, which provided success in overcoming this problem.

In 1991, during the war, most of the electric power stations in Iraq were destroyed, consequently, the country lived for several months without electricity and in total darkness during the night. Later on, a number of these stations were repair, although, they were capable of providing a lesser supply than before due to the difficulty of achieving full production. This was due to the economic blockade that the country had to suffer after the sanctions that the United Nations imposed on the country consequently to the occupation of Kuwait. The providing of electricity reached less than the 50% in the period from 1991 to 2003, especially during the hot summers. These stations were destroyed again in 2003, during the following war, which led to a further significant shortage of electricity supply, still underway thus far: the current rate of the supply reaches less than 4 hours per day, sometimes, which represents the 15%

The persistence of this situation for 26 years created a real challenge for the Iraqi architects, who had to innovate climatic treatments in their designs to solve this problem. In this regard, there is a need to resort again to the climatic treatments that were adopted in the traditional architecture, which did not use technology but rather sustainable architectural solutions in order to create a comfortable environment, achieved excellent results in regard of the climatic aspect.

All the aforementioned factors have had an impact on the traditional environment and have promoted the concept of modernity (as mentioned in sections 2.7 – 3.5 – 4.7.2). In this regard, the solutions of such problems demand a deep understanding of the factors that have caused them, which will help to preserve what remains of the local identity in

the memory of the local society, especially the young generations, before it disappears completely.

In the 20th century, the Iraqi architectural identity underwent transformation processes induced by the new architectural production that resulted from the haphazard attempts of the architects and urban designers (see section 3.3.1). In addition, other key factors of this transformation were the instability of the local political situation in Iraq, as well as the impact of the foreign thoughts, since many of the foreign architects who had arrived in Iraq supported the processes aimed at a dramatic change (as mentioned in section 2.5.1).

In the Iraqi architectural scene of the 20th century, three intellectual trends can be singled out, as follows (section 3.3.2):

- An intellectual trend of architects who supported the foreign currents, particularly those who supported the tide of the Modern Movement as they considered it as a philosophy based on function. The symbolic and aesthetic values achieved by the exponents of this trend were extremely limited as a consequence of form follow the function, which Modernism laid its foundations, so that, as a reaction, the supporters of the subsequent current, Postmodernism, began to deem paramount the search of symbolic and aesthetic values. Shirzad (1987) has described this trend as a trend that was encouraged by the international architects who, at the time, were working in Iraq and had already designed important buildings.
- An intellectual trend that aimed at linking the new with the old by copying elements from the traditional architectural heritage, so that the symbolic aspect became more important due to the reuse of features of the local past.
- An intellectual trend that adopted a simulation of the old elements by recreating them into new forms. The supporters of this trend were very concern with considerations for the climatic aspects whilst the symbolic aspect was limited and abstract. For (Khodaer & Nassir, 2010), the result of the use of this approach is an overmuch using of heritage elements which represented in a number of projects executed by local architects, most of them graduated from the architectural Iraqi school, who sympathised with heritage and modernity values to varying degrees.

The affirmation of the architectural currents of Modernism and Postmodernism led to the creation of an architectural cultural resistance as a reaction against them and the transformations that they had enacted. Thus, the architectural trends were a result of the transformations that had taken place in the urban environment, (section 3.3.2).

The formation of the new environment, including its elements and relationships, led to transformation processes, so that the trends that emerged were conditioned by how much near or far from the traditional environment they were. As a result, the trend supporting the foreign currents was detached from the local context and close to modernity, while the imitative trend adopted elements of the traditional environment. The third approach mixed the traditional elements with modern within a new style, this trend was close to postmodernism when it emerged in the Iraqi environment.

The traditional built environment of the city of Basra has always been considered as an example of harmonious urban environment due to its characteristic urban fabric (as clarified in section 4.4), consisting of narrow and winding alleys sided by attached houses built with local materials on a human scale and according to a hierarchy of spaces, as mentioned by Al-Ali (1988), Basra's identity was formed by history, tradition, habits, topography and the climate of the city, in addition to features of Arabic Islamic cities. (see section 4.5). By contrast, Basra's contemporary urban environment is a hybrid environment, marked with sharp confliction between the diverse forms of the buildings, each of which is detached from the other and built on a large non-human scale with numerous alien materials along wide streets (section 4.7.2).

These characteristics of the traditional environment, which had formed according to socio-cultural and environmental aspects (as mentioned in section 4.7.1), have gradually disappeared and this transformation has led to the deterioration of the traditional architectural identity. According to Al-Ali (1988), Basra and many Iraqi cities have undergone a significant social, economic, political and cultural change, which caused a dramatic urban transformation within the local urban built environment. The causes behind this deterioration are the initial economic development - followed to the discovery of petroleum reserves in the local soil – and the rapid urban expansion (see section 4.8),

as well as the new architectural production that it entailed, the ensuing decades of wars and the destruction that those wars involved,

The wars that Basra has gone through produced many negative consequences, the most important of which is the forced migration of the local residents out of the city in search of a safe haven. Since the war between Iraq and Iran lasted for eight years from 1980 to 1988, a period during which the city was bombarded with artillery and aircraft every day, the majority of the residents left the city and settled in other cities or other countries, building new relationships, most of those who had fled Basra did not return to the city after the war ended, in 1988. This was also due to the outbreak of a new war, started after a few years, in 1991, after the occupation of Kuwait. Therefore, there were not enough opportunities for the local residents to return to the city, especially since most of the houses in Basra, during the eight years of war, had been either destroyed and damaged or neglected to such an extent that they required great maintenance and rehabilitation. After the end of this second war and the subsequent popular revolution against the government, in 1991, the city seemed almost completely destroyed and there was an urgent need for great maintenance and rebuilding work, especially in the field of the infrastructures. Nevertheless, the maintenance requirements could not be fulfilled due to the economic blockade and the international sanctions.

In addition, the lack of awareness, of both the society and the government of the importance of preserving the local heritage and identity. As to awareness, there is an evident lack thereof in regard to the value of identity and heritage, particularly for the young generations under 30 years old, who they do not give enough attention to the local architecture and they support the modern style, Bazi (1989) has referred that the absence of awareness from the local population has contributed to a transformation of the local identity, which took place unconsciously within the society and resulted in an extensive modification of the local built environment of the city of Basra. (as in sections 6.3.7.1 – 6.3.7.2 – 6.3.6.7 – 6.3.6.2 – 6.3.5.4). This poses a real threat to the existence of the traditional architecture in local built environment and to its continuance in future, this concern regarding awareness not only for the people but also for the decision-makers. A paradigmatic example that proves it is the case of seat of the Directorate of Heritage and

Antiquities in Basra, which was housed in a heritage building, with a very rich architectural decoration, dating from the Ottoman period. Nevertheless, the building was recently demolished and replaced by a new one, designed according to the modern style, using non-local materials typical of the global architecture that creating a sharp contrast with the surrounding environment. Soon after its completion, the new edifice, built destroying the old one, was inaugurated by the Directorate with a symposium held within its premises. The theme of the symposium was the importance of the architectural heritage of the city Basra and how to preserve it. This clearly indicates the lack of awareness that not only common people but also decision makers have.

All the aforementioned reasons prevented the residents from returning to the city: as a consequence, the city lost most of its traditional population, which strongly affected the city's identity. Moreover, during this period, there was a reverse migration, especially from the neighbouring cities and towns, of people searching for jobs, because Basra, notwithstanding the damages of war, was still an important economic city thanks to its plenty of oil reserves and a large number of factories in addition to its ports. These factors led to a significant demographic change in the city, which affected the social fabric and therefore had a clear role in the loss of the city's identity and its transformation.

7.2.1 The proposed Guidelines

According to the literature review and empirical study, the modern architecture in Iraq had been influenced by the foreign styles. Therefore, it does not meet the approval of the Iraqi people, particularly in terms of social and environmental aspects. The modern architectural features like wide streets, large windows in facades, open balconies and the gardens at the front and at the rear of the houses, are considers as threats to the privacy of the family and the neighbours, a value that is regarded as the bedrock of the Islamic society.

According to one of its many definitions, a guideline is an established standard used to judge or examine something. For Sadler (1987), the guideline is "a distinguishing property or characteristic of anything, by which its quality can be judged or estimated, or by which a decision or classification may be made". The proposed guidelines aim at

helping architects and designers to maintain the traditional identity of Basra during the future development of the city, via improving the general and technical policy, and considering the social and environmental aspects. The proposed guideline is based on the literature and the analysis of the survey findings. The design guidelines are set out in three levels, as it is clarified in Appendix C.

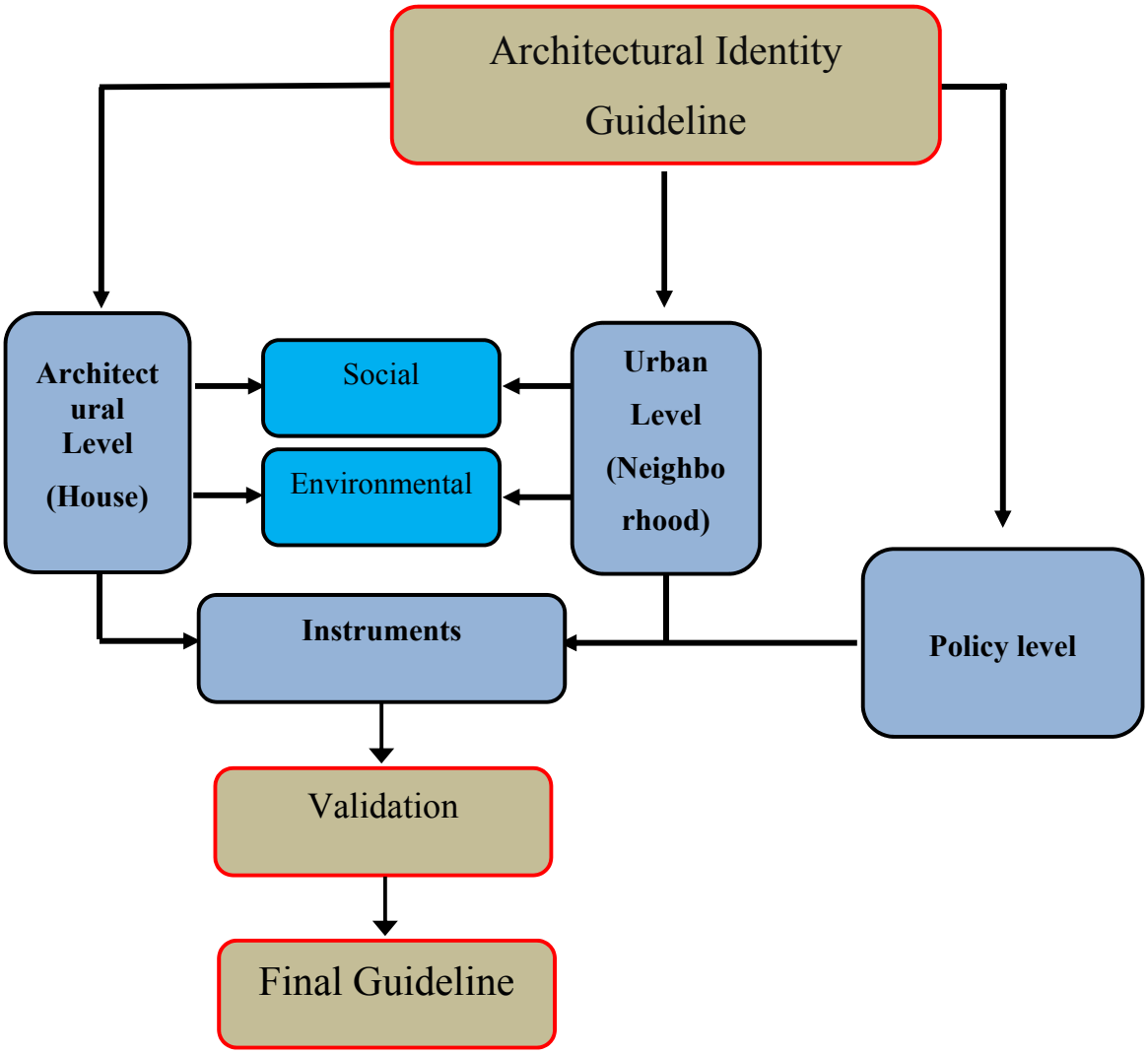


Figure 7-3: The Proposed Guidelines

7.3 Validation of the Guidelines

Reliability is the re-test of a test aimed at getting the same results. In both scientific and natural research, which adopts quantitative, reliability is quite easy to achieve. By contrast, in qualitative research, the achievement of reliability is more difficult as there is a need for more attention in analysing the data gathered from the respondents in order to avoid the misunderstanding.

As Gillham (2005) stated, if two or more researchers use the same method and get the same results, hence the method is considered reliable. The researchers should be certain about the validity of their work since validity represents the usefulness of their research endeavour. Any research that does not add any value is useless and therefore considered invalid. In both qualitative and quantitative research, validation is required. However, in quantitative research, validation is easier than in qualitative research, since objectivity is easily shown in it. In qualitative research, researchers should avoid their subjective opinions on the data and rather follow an objective analysis. According to Creswell (2003), there are various evaluation types in regard to validation. Validation in qualitative research may be achieved by means of a rich and detailed description of the context and background of the research. For Shenton (2004), credibility is increased by adopting a deep description of the research methodology and of the data collection method, in addition to a comparison of the results of the research with the previous researches, as well as clear explanation of the analysis and findings. By using one or a mix of the methods mentioned above, the validity of research is achieved. For quantitative research, many methods are used to achieve the validation such as error levels, statistics measurements and certain instruments.

The validity and reliability of the quantitative and qualitative research depend on two trends of thought. The first adopted the forms of evaluation mentioned above to achieve validity and reliability via the finding of the quantitative and qualitative research. The other current believes that the qualitative research aims at a deep understanding of a certain context, accordingly, the achievement of the reliability or validity of the results may not be easy or even not possible at all (Finlay, 2006). This trend reckons that the

aforementioned forms of evaluation are not appropriate to be used for the evaluation of the qualitative research, therefore it may be used only for the quantitative research.

According to what said above, due to the objectivity of the nature of quantitative research in addition to its ability to be extended to a context larger than its sample, the quantitative research is easier to dependence generalizability. However, objectivity in qualitative research depends on the ability to transfer the results of the research to another context or group of people. According to Easterby-Smith et al. (2002), the generalizability of the finding of the research means the possibility to apply what has been concluded from the selected sample to a wider population, in other words, the ability to apply theories that have been developed from a certain case to other cases (Robson, 2002).

7.3.1 The Focus groups

In order to validate the proposed guidelines, a focus-group discussion was set up, which aimed to review, gain insights into and ideas regarding possible corrections and developments of the guidelines.

The group of experts consisted of 15 professionals, selected according to their experience in architecture and urban design, both in Iraq and abroad. Additionally, the experts were selected from various age groups. A number of them had previously been interviewed for data collection purposes. All of the experts are holders of PhD or MSc degrees, and seven of them are Iraqi nationals, the other experts are from various countries which have a similar environment, comparable climate conditions, and similar cultural and social features.

The proposed guidelines, along with a brief stating the research aim and key objectives were sent by email to all the experts a few days before focus group convened. Twelve of the participants met face to face, whilst the three others, located in Iraq participated via Skype. The session lasted over 3 hours, and was successful in all its themes. The draft of proposed guidelines presented to the focus group is shown in Appendix (C).

At the beginning of the session, an introduction was given to the group by the researcher, to present the proposed guidelines to the participants, in order to clarify the main points

and to communicate the specific aims of the focus group. The experts were then asked to comment, specifically identifying the positive and the weak points of the proposed guidelines, and the related issues such as factors or instruments that were not considered. Accordingly, the main three themes which emerged during the session were;

- The gaps and the missing points in the proposed guidelines.
- The barriers and obstacles that may be faced the implementation of the guidelines.
- The suggestions and modification or any comments regarding the guidelines.

7.3.2 Overall Outcomes

It is worth mentioning that the interaction between participants was of a high level, and participants were fully engagement in the discussions. The experts were fully satisfied with the proposed guidelines, and all of the individual experts agreed that the recommendations offered by the proposed guidelines show promise in recreating the urban identity of Basra. Feedback obtained throughout the focus group meeting captured the areas where improvement to the guidelines was possible. Moreover, within the feedback, the experts stated and justified that there is a necessity for such guidelines, to ensure the city's identity is maintained within future designs and projects. Furthermore, the experts appreciated that the proposed guidelines are flexible in nature, with the capacity to allow for modifications. Additionally, the experts agree that the proposed guidelines represent a clear and understandable support process for maintaining and reviving the urban identity of the city of Basra.

However, some issues were identified, and a number of examples of constructive criticism were raised in order to improve the guidelines. It is important to mention that the highlighted opinions regarding weaknesses, suggestions and barriers are connected to the scope and limitations of the research, however they provide useful guidance for further research. The involvement of experts has added value to the guidelines, and the points raised, and ideas presented during the focus group discussions were beneficial.

Regarding potential gaps and missing information in the proposed guidelines, the experts did not highlight any specific missing issues from the proposed guidelines. However, a

number of experts commented on specific areas. For example, one of the participants was not convinced with the recommendation of preventing the juxtaposition between the residential and commercial areas, in order to achieve a high level of privacy. The participant believes that this kind of isolation conflicts with sustainability, and mentioned that current UN standards emphasise mixed land use within neighbourhoods. Moreover, the participant noted that the guidelines emphasise the variety of the residents within the neighbourhood regardless of individual economic and cultural backgrounds.

Another participant noted that a conflict exists within the proposed guidelines between the privacy and social interaction recommendations. The participant thought that the section which mentions reducing distances between the doors of neighboring houses in order to encourage interaction between residents, will lead to reducing privacy levels. However, the traditional architecture in Basra provided a high level of privacy to families within the houses, despite the small area surrounding the houses, and furthermore the doors of traditional houses were very close to each other. The orienting of the spaces within the house towards the courtyard enhanced the privacy, however.

Regarding the suggestions, the only main suggestion raised by some of the experts was to reclassify the guidelines according to their end users. They mentioned that some of the points in the guidelines related to the architects and urban planners, while others related to the decision makers. In addition, some points related to the residents, in particular within the first level that related to the policy recommendations.

There was a further suggestion from one of the participants, who suggested the inclusion of bicycle pathways in the future layout of the neighborhoods to encourage bicycle use and walking, and non-Restricts on only vehicles and pedestrian's movement. He mentioned that the new recommendations of the UN emphasise this issue, since it represents one of the sustainability principles.

The experts mentioned a number of obstacles and barriers that may face the implementation of the guidelines, which are summarised below, as;

- The currently unstable political situation in Iraq, especially after 2003, creates difficulties in terms of developing the plans and carrying out future work. The

current priority of the government is to achieve security. The security situation represents a key obstacle to any development process in Iraq, which was confirmed by most participants.

- The overlapping of terms of reference between the local government of Basra and the central Iraqi government, particularly after 2003, create an ambiguity regarding which entity holds the responsibility of implementing the guidelines.
- The current economic situation may affect the implementation of this guidelines, since finance is an important factor in their implementation. However, the current priority of the government is to reconstruct the infrastructure of the city which was completely destroyed during the previous wars.
- Current government legislation does not support the implementation of these guidelines; therefore, there is a need to pass new laws and regulations which are more closely aligned with the guidelines.
- The multiple entities in Basra who are responsible for the issue of identity, create confusion about which body will adopt these guidelines, and ensure their execution.
- The acceptance of the architects and designers, as they may consider the guidelines as a constraint to their freedom and creativity in design.
- The engagement of the local people, and in particular the young generation, who in general possess insufficient knowledge of the heritage value and the traditional identity of Basra.
- The phenomenon of unauthorised houses which emerged after 2003, and became common in the city of Basra, leading to negative effects on the urban landscape of the city. This phenomenon is currently out of control and is expanding at the expense of other land uses and official, authorised developments.

7.4 Summary

The findings illustrate how the traditional architectural style was formed to meet the desires of the residents, particularly in regard to the social and environmental aspects. By contrast, as the findings indicate, most of the experts and the residents within the three neighbourhoods were not satisfied with the contemporary architectural style used in

Basra, since, as they mentioned, it is neither in line with the aspirations of the residents nor satisfies their needs in terms of social and environmental aspects.

The findings illustrate the main dimensions that play a significant role in the formation of the Iraqi identity, which are divided into a number of factors, measured according to a set of criteria.

Accordingly, there is a necessity to develop guidelines for the future of the identity of the city of Basra, which should be appropriate for the society and the city's environment. Based on the analysis of the empirical study, a set of guidelines for the future identity has been developed.

The subsequent chapter deals with the conclusion and recommendations of the research.

Chapter 8: CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This chapter provides the main conclusions of the research and makes the link with the theoretical issues and questions raised in the context. The chapter also presents the final guidelines for the future architectural identity of the city of Basra. These recommendations are aimed at guiding professionals and urban planners in maintaining the city's identity and enabling the modernisation during future development processes. Finally, the chapter illustrates the research contribution and its limitations.

8.2 Achievement of Objectives

The findings of this research expected to provide a set of guidelines for architects and urban planners in order to maintain the city's identity in the future. In addition, they provide a thorough understanding of the positive and negative aspects of both traditional and contemporary architecture and, therefore, recreate the urban identity suitable for the social and environmental aspects.

This aim has been achieved effectively by fulfilling the research objectives. A set of objectives for this research has been developed in chapter one, which are:

- To find out the factors that played a significant role in the formation process of the traditional architectural identity of the city of Basra.
- To identify the physical architectural elements that shaped the traditional architectural identity of the city of Basra.
- To explore how significant the role of cultural identity is in the formation of the architectural identity of the Iraqi cities, as well in the resistance against the influence of modernisation.
- To examine the degree of satisfaction of people for both traditional and contemporary architecture in terms of socio-cultural and environmental aspects, and

to compare traditional and global architecture in Iraq in relation to their relative suitability for the socio-cultural and environmental conditions.

- To develop a set of guidelines of urban design practice as a guide for professionals to produce design solutions favouring traditional architectural identity while enabling modernising the Iraqi cities.
- To evaluate and validate the guidelines so as to use as a guide for urban design practices in neighbourhoods where the considerations for local identity are of socio-cultural and environmental aspects.

These objectives have been achieved via literature review, semi-structured interview, questionnaire survey and focus group, as following;

Objective One; To find out the factors that played a significant role in the formation process of the traditional architectural identity of the city of Basra.

This objective aimed at building a theoretical base on the formation of identity, in general, and, more in particular, the identity of the city of Basra. The findings that appeared in this objective related to the main factors that shaped the identity of the city. The research identified six factors, which played significant roles in the formation of the city's identity, which are social, environmental, cultural, religious, economic and political factors. These factors have been identified according to reviewing the literature and the interviews with professionals. This has been achieved in chapters two, three, four and six. Therefore, the first objective has been successfully accomplished.

Objective Two; To identify the physical architectural elements that shaped the traditional architectural identity of the city of Basra.

This objective focused on the main physical architectural elements that formed the traditional identity of the city. There are particular elements that have distinguished the architecture of the city and created the uniqueness of its identity. These elements emerged from the literature and the interviews with the experts, and are: hierarchy of the planning, interior courtyard, shanasheel, organic alleys, indirect entrance, indoor orientation,

attached houses, solid external walls, treatments of the facades and human scale. Moreover, the natural aspects have contributed to the formation of a distinguishing the city's identity such as the canals that traverse the city. This objective has been achieved through the chapters three, four and six.

Objective Three; To explore how significant the role of cultural identity is in the formation of the architectural identity of the Iraqi cities, as well in the resistance against the influence of modernisation.

To achieve this objective, the literature review in chapters two, three and four, and the semi-structured interviews and questionnaire survey findings in chapters six and seven, revealed the importance of the role that culture plays in the formation of the city's identity. The values, habits, traditions and norms of a society create a cultural resistance, which is of paramount importance as it plays a fundamental role in protecting identity against any possible threat. The literature and the semi-structured interviews clarified that modernity represents a real threat to local identity. Therefore, a cultural resistance is necessary to reduce the influences of modernity and preserve local identity.

Objective Four; To examine the degree of satisfaction of people for both traditional and contemporary architecture in terms of socio-cultural and environmental aspects, and to compare traditional and global architecture in Iraq in relation to their relative suitability for the socio-cultural and environmental conditions.

To achieve this objective, three neighbourhood's studies conducted to collect information about the situation of the architectural identity within each neighbourhood. Chapter six is a successfully presented the positive and negative features of both traditional and contemporary architectural styles, in addition to the opinions of householders and professionals regarding them. Questionnaires distributed to respondents, which are the householders of the three neighbourhoods within Basra city. Furthermore, semi-structured interviews conducted with professional's architects and urban planners, approximately 12 experts were involved. Interviews with these experts helped in

understanding the real situation of Basra identity and the reasons behind the loss of the local identity. The questionnaire survey provides a comprehensive view of resident's opinions while the qualitative study provided an in-depth understanding of traditional and contemporary identity features. The exploring of both householders and expert's opinions were important to achieve this objective. These interviews triangulated with supporting documentation and field observation.

The research also adopted a comparative architectural analysis method to compare between the different architectural styles in the city. The comparison was carried out according to socio-cultural and environmental aspects. The clarification of the differences between traditional and modern architecture is important to provide an understanding of the characteristics of each style.

Objective Five; To develop a set of guidelines of urban design practice as a guide for professionals to produce design solutions favouring traditional architectural identity while enabling modernising the Iraqi cities.

The findings of the interview, the questionnaire survey in addition to the literature review led to develop guidelines aimed at maintaining the city's traditional architectural identity by improving architectural and urban policy, regulations and legislations, awareness of both society and professionals and not only of the decision makers, privacy within the houses and the neighbourhoods, safety and security, social interaction, familiarity, and building materials. Furthermore, a set of instruments to help architects and planners to deal with both traditional and global architectural productions was suggested in order to achieve a balance in the city's urban landscape. The guidelines were articulated on three levels: the first level, related to general policy and technical recommendations, the second, related to an urban level concerned with the neighbourhood, whilst the third related to an architectural level concerned with the house. The proposed guidelines were based on the review of the literature, which is presented in chapters two, three and four,

and the analysis of the empirical study findings, which is clarified in chapters six and seven.

Objective Six; To evaluate and validate the guidelines so as to use as a guide for urban design practices in neighbourhoods where the considerations for local identity are of socio-cultural and environmental aspects.

The sixth objective of the study set out to validate the proposed guidelines, which are previously developed through a review of the literature in chapters two, three and four. In addition to semi-structured interviews and questionnaire survey, data were collected and analysed in chapter six. The validation process has been carried out with selected experts by means of a focus group in which 15 experts, from Iraq and some other countries having the same culture and environmental context, were involved. The experts from Iraq took part in it via Skype. There were three main themes identified for the validation discussion, which were: the gaps and missing points in the proposed guidelines, the implementation, in terms of barriers and obstacles, that the guidelines may face, and any suggestion or comment regarding the proposed guidelines. The experts agreed that the proposed guidelines were comprehensive and logical and useful for reviving the traditional identity if applied in real practice. This objective has been successfully achieved in chapter seven.

8.3 Conclusions

The essential task of this study has been to examine the features of traditional and contemporary architecture in order to understand the differences between them. Then, to benefit from positive aspects and avoids the negatives of both of them so that they may be taken into account for the future development of the city.

In-depth evaluation has been carried out by this study for the current situation of Basra's identity and the reasons of its deterioration along with a proposal to take into account the positive aspects of traditional architecture in the future development of the city in

combination with the positive aspects of modern architecture. The study has also clarified the impact of the global architectural style on local identity in Iraq, and Basra in particular, which started at the time of the British occupation, and became stronger after the discovery of petroleum reserves in the 1920s, which played a key role in the rapid modernisation of the country that led to a transformation in most of the life aspects of local society.

The three wars that took place in the past four decades have been singled out as further threats to the city's architectural identity, since their impact led to significant transformations in the urban landscape of the city as well as to a huge demographic change in the local society, in terms of immigration or population pyramid changes. Most of the local residents left the city during the war periods and did not return at the end of the conflicts. Followed the latest war, in 2003, the rebuilding process of the city was assigned to foreign firms that, either as investors or contractors, carried out several projects which, though, were alien to the city character. Local people perceived the style of the new buildings as unfamiliar: however, both people and the government's lack of awareness in regard to preservation and safeguarding, along with a large availability of foreign materials, led the loss of the local Iraqi architectural identity and value.

Evidence from the empirical study showed that the majority of the residents and the interviewees evaluate traditional architecture as more appropriate for the local society in terms of social and environmental aspects. The main conclusions of the study indicated a number of advantages and disadvantages of traditional and contemporary architectural can be summarized accordingly:

The results indicated that privacy is still held in high regard and requested by society, therefore some traditional architectural features such as the interior courtyard, the indirect entrance, a limited number and size of windows in the facades, may help architects to address the issue in the future through benefitting from architectural solutions from the local past. The shanasheel was used in traditional architecture to achieve a level of privacy but also as a successful climate solution: nevertheless, it is no longer used in modern architecture or, at most, it is used as a merely a decorative element for the

facades, since modern architects systematically prefer to resort to technology regarding climatic solutions.

The organic network of streets of the traditional architecture is characterised by its hierarchy determining the street width according to the issue of privacy. This hierarchy was also a tool deal with the harsh climate by providing shade and manipulation of the wind currents and consequent control over the air circulation. The establishment of wide streets in order to meet the requirements necessary for the vehicle's circulation led to replacing the organic network with a grid-iron network. In order to remedy the problems that emerged after the adoption of the new grid-iron network, such as the lack of both shading and manipulation of the wind movement, special solutions were implemented, however, these solutions were not much effective.

One of the distinctive features of traditional architecture is the human scale, which integrates people within their environment, while, by contrast, the new forms ignore the human scale by inflating the dimension of the buildings and adopting the motorised vehicle, rather than the human, as a basic unit. According to that, the new architectural style made of high-rise buildings and wide streets is not supportive of pedestrians and it marginalises them.

In traditional architecture, each house was generally attached to three sides with the neighbouring houses, in order to provide protection regarding climate, while the fourth side that is the front façade, was shaded by the narrow alley. All this no longer applies to modern houses.

The traditional city’s skyline reflected the power of the religious and a sense of unity, being dominated by the elements of the central Mosque such as the dome and the minaret, which, in modern cities, have been replaced by the multi-storey buildings. Although the modern city skyline offers diversity and sense of global development, it conflicts with the need for privacy, especially regarding the adjacent houses.

In traditional architecture, materials were chosen according to their suitability for the local climate: the traditional houses were built using mud or bricks to erect walls that were, especially the external ones, thick in order to provide a high level of thermal

isolation. By contrast, the modern-style houses have non-particularly, or thin, walls of bricks or concrete blocks, which reduces the degree of thermal isolation.

The laws and legislations of planning play an important role in implementing the master plan and identify the urban character of the city in terms of land uses, a height of buildings, density, roads system, building facades and the materials used. The laws and legislations derived of Western had a clear effect on the traditional architecture, which was reflected on the height of buildings, width of the streets and human scale. The principles of these laws and legislation were valid to apply to any city.

8.4 Final Guideline

In order to achieve the aim of this research which is to develop guidelines to guide professionals in producing urban design solutions aimed at maintaining the local identity while enabling modernisation, a set of guidelines for city identity has been established and validated by the experts focus group. The recommended set of guidelines if it completely applied well revive the local identity of Basra city, and enabling development with considering traditional identity. The final guidelines are clarified below;

First Level **Policy Recommendations**
1- For the Decision Makers
Delivering educational programs with local communities aimed at raising awareness on the value of the historical and heritage areas, (as in sections 6.3.7.1 – 6.3.7.2 - 6.3.6.2 – 6.3.5.4 6.2.5.1).
Supporting local people to maintain their traditional houses by awarding financial loans or incentives. (sections 2.10 – 3.5.1- 4.10 – 4.12.1 – 6.2.5 – 6.3.7).
Introducing site-specific planning laws and legislations for the city of Basra, alongside the centrally issued norms, which do not always respect the local identity, (as mentioned in sections 4.10 – 6.2.5)

Reinforcing the fight against illegal constructions, which are damaging the traditional patterns of Basra's heritage, particularly from 2003 onwards. (section 6.2.5.1)
Delivering training for the new craftsmen and builders on the traditional building methods and the use of the traditional materials. (see sections 2.10 – 3.3.1 – 6.2.5 – 6.3.7.1).
Facilitating the construction of buildings following the traditional styles by adopting norms respectful of the local identity and by using traditional materials and avoiding the use of unfamiliar materials and forms. (see sections 3.4.3.2 – 4.5 – 6.2.3.1 – 6.2.4.2).
Supporting people to adopt the traditional styles in their buildings through incentives such as providing them with land for free or at reduced costs. (as in sections 4.10 – 2.10 – 6.2.5).
Developing periodical plans, for instance once every five years, drawn by teams of specialists in order to carry out the maintenance and rehabilitation work necessary for the heritage buildings and areas. (as mentioned in sections 4.9 – 4.10 – 4.11)
Continuing to promote the inclusion of the heritage of the city of Basra city in the World Heritage List. (see sections 2.10 – 6.2.5).
2- For the Professionals
Improving awareness for professionals and public officers through clarifying the value for the local identity of local architectural heritage and traditional buildings and construction techniques. (see sections 2.10 – 3.2.3 – 4.4 - 4.7.2 – 6.2.3.1 – 6.3.3.1 – 6.3.5.3).
Involving local people in the design and development process pertaining to the preservation of the traditional heritage buildings and sites. (as mentioned in sections 2.10 – 4.12 – 6.2.5).
Activating the role of the Department of Architecture of the University of Basra, which should broaden its research scope by focusing on the disciplines and techniques aimed at the protection of the local heritage as well as at the safeguarding and enhancement of the traditional identity. (section 6.2.5.1).
Developing further studies aimed at documenting both the traditional buildings and neighborhoods (tangible heritage) and the social habits, traditions, lifestyle and behaviors of the local residents (intangible heritage).

Delivering specialist training courses for the architects and urban designers regarding the conservation techniques used for the traditional buildings and neighborhoods. (see sections 2.10 – 6.2.5).
3- Technical Guidelines
Creating an open data repository on traditional and heritage buildings, also through the support of technical BIM, photography and laser scanning. (section 2.10 – 2.9.2).
Avoiding the adoption of complex visual solutions only aimed at inducing amazement by means of unusual colors, materials or forms. (see section 2.9.2 - 3.5 - 3.3.2.3 – 4.7.2 – 6.2.2.1 – 6.2.2.2 – 6.2.2.4 – 6.3.4.1 – 6.4).
Pursuing a process of abstraction of the traditional architectural elements through new technology so as to produce forms that are modern albeit retaining cultural depth. (see sections 2.3.1 – 2.8 – 3.3.1 – 3.3.2.3).
Creating new meaning and possibilities of interpretation for the imported architectural forms in order to reduce the contrast between them and the local ones in the recipient's perception. (as mentioned in sections 3.3.1 – 3.3.1.2 – 3.3.1.4 – 3.3.2.3).
Creating a cultural filter of local values, traditions and habits intended to be a base for a cultural resistance against the potential threats of an indiscriminate adoption of patterns and features of global architecture. (as in sections 2.3.1 – 2.7.2).
Adopting the superficial treatment as the base for the gradual process of transformation. (see sections 2.7.1 – 2.9.1 – 3.3.1 – 3.3.1.4 – 3.3.2.2).
Focusing on the flexible elements that have the ability to fuse with the modern forms. (as mentioned in sections 3.3.1.4 – 3.3.2 -3.3.2.2 – 6.2.5 – 6.4).
Encouraging scientific research aimed at improving the local building materials with the help of technologies and applied research so as to render them appropriate for modern buildings. (sections 2.10 – 6.2.5.1).
Second Level – The Neighbourhood
1- Social Aspect
Privacy
Developing standards and determinants to avoid differences between the heights of the buildings, especially within the residential areas, in order to respect the privacy of the residents of the low buildings. (sections 3.3 – 3.4.3.1 – 6.2.2.2 – 6.3.3.3 – 6.4)

Taking into account the placement of the doors and the windows facing on to the alleys of the neighbourhood and avoiding their facing each other in order to prevent the direct sight. (see sections 3.2.5 – 3.4.1 – 3.4.3 – 4.5).
Preventing the juxtaposition between the residential and the commercial or mixed areas, which leads to a reduction of the level of privacy, increases the level of noise and encourages the circulation of strangers. (section 3.2.3).
Preventing strangers from accessing the neighbourhood by following the traditional pattern of the Iraqi urban fabric whose complexity is familiar to the locals whilst it disorients strangers. (as in sections 3.4.1 – 5.5.2).
Putting emphasis on the hierarchy of the spaces within the neighbourhood by clearly distinguishing spaces on the basis of their public, semi-public or private function then placing them according to this hierarchy.(as mentioned in sections 3.2.5 – 3.4.1 -3.4.2.3 – 3.4.3 – 6.2.4 – 6.3.3 – 6.4 – 6.3.5).
Creating a set of courtyards within the neighbourhood to be each of which would serve as a private space for the surrounding houses, whose windows would face onto them. (as mentioned in sections 3.4.1 – 3.4.2 – 3.4.3.1 – 4.7.1 – 6.2.3.1 – 6.2.4.1 - 6.3.3.3 – 6.4).
Adopting a system of Cul-De-Sac streets in the residential neighbourhoods in order to reduce the circulation of the strangers within them. (section 3.5.1 – 4.9.2).
Safety
Reducing the rate of crimes and raising the level of safety by avoiding the mixed land use. (see sections 3.4.1.2 – 4.9.3 – 4.1.2.2 – 6.3.5.10 – 6.3.6.3 – 6.4).
Avoiding a high residential density in order to create a safer environment. (as in sections 3.4.2 – 3.4.1 – 3.4.2.4).
Taking advantage of the Cul-De-Sac streets of the neighbourhood as play areas for children since they provide a safe environment in addition to privacy. (section 3.5.1 – 4.9.2)
Separating the circulation of the vehicles from that of the pedestrians which would decrease the number of accidents and creates a safe environment. (section 6.3.5).
Adopting a collective car parking system within the neighbourhood, which would also help to create a safe environment and reduce the risk of accidents. (sections 3.4.1 – 6.4).
Adopting the style of the attached house, this would provide a high level of security within the residential area. (as in sections 3.4.1 – 6.2.4.1 – 6.4).
Enhancing the legibility of the public space with a design that ensures its security and possibility to be easily controlled. (section 3.3.1.4 – 3.4.1 – 6.4 – 6.2.3).

Interaction
Putting emphasis on the style of the attached house within the residential area since it promotes the relationships between the neighbours and improves the social interaction. (see sections 3.4.2 – 6.2.4 – 6.3.5.1 – 6.4)
Creating a social environment, which will enhance the interaction between people by creating an open space that can serve as a core around which the houses gather and the neighbours meet each other, as in a place for social occasions. (section 3.4.1.3 – 6.2.3 – 6.3.3 -6.4).
Ensuring the creation of a large number of urban public spaces in order to encourage the contacts between the residents and strengthen social relationships. (as in sections 3.4.1.3 – 6.2.3 – 6.33 – 6.3.5 – 6.4).
Adopting a collective car parking system, this will increase the opportunities for the residents to meet each other, hence increasing social interaction. (sections 3.4.1 – 6.4).
Giving priority to pedestrian pathways more than vehicle ways so as to encourage people to interact with each other. (sections 3.4.2 – 6.4).
Minimising the width of the residential land plots and reducing the distance between the doors of the different houses in order to strengthen the social relationships and increase the social interaction, by offering more opportunities for the neighbours to meet each other. (as in sections 3.4.1 – 4.10 – 6.2.5 – 6.4).
Familiarity
Adopting references to the local architecture preventing the discontinuity with the traditional identity, and ensuring the connection with the collective memory. (see sections 3.3 – 6.2.5 – 6.3.3.2 – 6.3.5.3).
Rebuilding the demolished heritage buildings regarded as main landmarks of the memory of the city with the previous design and using similar materials, as much as possible, in order to stimulate the collective memory of residents and revive the local identity. (Such as a landmark of Surin clock tower). (see sections 6.2.4 – 6.3.5.4 – 6.4).
Building arcades, especially with columns, as in Arabic traditional cities, so as to create a sense of unity and homogeneity and to reduce the contrast between the disparate designs and materials of the different buildings. (as mentioned in sections 2.4.2 – 3.4.2.2 – 4.6 – 4.7.1 -6.2.3.1 – 6.3.6.5 – 6.4).
Paving the paths, alleys and the entire public space, especially within the ancient areas, with the “Fershi" clay tiles of the local traditional architecture. (as in sections 3.4.3 – 4.7.1).

Reshaping the city skyline so that it can reflect its historical identity, rooted in the past, by enhancing the visibility of the religious elements and increasing their pre-eminence over the other buildings. (as in sections 3.2.5 – 6.2.4 – 6.4).
2- Environmental Aspect
Climate
Creating climate and environmental architectural treatments, such as buildings projection or manufactured roofs in order to provide the pedestrians with protection from the harsh climate especially in the summer. (see sections 3.4.3 – 3.3.2.1 – 3.4.2.1 – 4.5 – 4.6 – 6.2.5 – 6.4).
Avoiding wide and straight streets and roads, especially for the pedestrians, in order to create air circulation against the harsh climate and create a comfortable environment. (as clarified in sections 3.4.2.1 – 3.5 – 6.3.5 – 6.3.5.2 – 6.4).
Adopting a system of arcades for the wider streets in order to create shaded areas for the pedestrians. (as in sections 3.5.1 – 6.3.5.2 – 6.4).
Reducing, as much as possible, the streets for cars within the residential areas and increasing pedestrian paths to provide a healthy environment devoid of pollution. (sections 3.4.1 – 3.5 - 6.4).
Adopting the attached house type to provide shadows for the pedestrian pathways. (as mentioned in sections 3.4.1 – 3.4.2 – 6.2.4.1 – 6.4).
Reducing the width of the streets, as narrow streets are easier to shade. (see sections 3.4.1 – 3.4.2 – 6.3.5 – 6.4).
Developing standards and determinants aimed at avoiding differences between the height of the buildings, especially within the residential areas, to avoid any reduction of ventilation and lighting for the lower buildings. (as in sections 2.10 -4.5 -4.10 -4.9 -6.2.5 – 6.3.5 – 6.4).
Material
Monitoring and controlling the importation of the building materials, submitting them to checking operations. (as in sections 2.9.2 – 2.10 – 4.4 – 6.2.4.2 – 6.2.5).
Developing standards for the quality of the building materials and their suitability for Basra's climate. (see sections 2.10 – 3.3.1 – 6.3.4.2 – 6.3.3.3).
Encouraging people to use the local building materials used in traditional buildings to enhance the ties with the past. (sections 3.4.3.2 – 4.4 – 6.22 - 6.2.4.1 – 6.3.4.2).

Avoiding the use of alucobond in the facades, widespread in Basra, which is unsuitable for its climate and has transformed the urban landscape of the city into a set of metal boxes, very far from the traditional identity, (see sections 4.4 – 3.3.1 – 4.6 – 6.2.2.4 – 6.4 – 6.2.5.1).
Orientation
Avoiding a layout of the pedestrian pathways following the west to east direction and preferring a north to south direction so as to shade them more easily. (see sections 2.5.2 -3.4.3 – 6.2.4 – 6.4).
Recommending to direct the pedestrian pathways according to a north-west to south-east direction, as the prevailing winds in Iraq blow in that direction. (as in sections 3.4.3 – 3.2.2 – 6.3.5.6 – 6.3.6.6).
Location
Taking advantage of the rivers system, and restoring the original aspect of Basra, historically dubbed as the "Venice of the East", as the contact with the waters was a distinctive feature of the city identity. (as mentioned in sections 4.3 – 4.9.3 – 4.9.2 – 6.2.2 - 6.2.2.2 – 6.4).
Developing water-based transportation by profiting from the canals within the urban area, one of the distinguishing component of the city identity. (see sections 4.9.1 – 4.9.3).
Third Level – The House
1- Social Aspect
Privacy
Avoiding the use of large windows, especially in external facades, since it reduces the level of privacy of the space. (see sections 3.4.1 – 4.5 – 4.7.1 – 6.2.2 – 6.4).
Screening the external windows with wooden parts, as in the traditional *shanasheel,* to prevent the direct sight into the interiors and to provide the families with a higher level of privacy inside the homes. (see sections 3.4.3 – 4.5 – 6.2.3.1 – 6.2.4.1 -6.4).
Classifying the spaces within the house according to a hierarchy proceeding from the public to the private in order to get more privacy. (see sections 3.2.5.2 – 3.4.1 - 3.4.3.1 – 6.2.2.1 – 6.2.4.1 – 6.3.3.3 – 6.4).

Creating an intermediate space, for instance the corridor, between the entrance and the interiors providing the family with higher level of privacy within the house. (as in sections 4.7.1 – 3.4.3.1 – 6.3.6.1 – 6.4).
Adopting a solution with two entrances; one for the guests and another for the family, to provide the families with a higher level of privacy within the house, preventing the direct sight from the outside. (see sections 3.4.3 – 4.7.1 – 6.2.3.1 – 6.2.4.1).
Safety
Minimising the size of the windows and reducing their number in the facades, hence raising the level of security. (sections 3.4.1 – 6.4).
Benefiting from the typology of the courtyard to create a private and safe zone within the house that can also serve as a play area for children. (section 6.3.3.3)
Familiarity
Encouraging people to build shanasheel on their modern facades, not only for ornamental or symbolic reasons but also for its functional and environmental importance, also using non- traditional materials and technologies. (as in sections 3.4.3- 3.4.3.1 – 4.5 -6.2.3.1 – 6.2.4.1 -6.4).
2- Environmental Aspects
Climate
Encouraging people to recreate courtyards so as to provide the houses with a climatically comfortable environment during the summer whilst adopting mechanical solutions to avoid possible problems related to the winter (for instance, pertaining to rain drainage). (as mentioned in sections 3.4.1 – 3.4.3 -4.4. -4.7.1 – 6.2.2.4 – 6.2.3.1 – 6.2.4.1 – 6.3.3.3 – 6.4).
Benefiting from the natural ventilation system to create an air flow within the house and to avoid the use of technology for its climate control. (see sections 3.4.1 – 3.4.3 -3.3.1 -4.4 – 6.2.3.1 – 6.3.6.6 – 6.4).
Material
Encouraging people to use wood the rather than iron or aluminium for the doors and the windows of the facades, as it reconnects modern buildings to the traditional ones. (as mentioned in sections 3.3.1.4 – 3.3.4.3 – 3.4.3.2 – 3.5 – 4.3 -4.6 -6.2.2.1 – 6.2.2.3 -6.2.3 – 6.3.4.2 – 6.4).

Fourth Level - The Instruments
In order to achieve a new sense of identity for the city of Basra, there is a need to identify instruments that could help architects and professionals to fill the gap between modern and traditional architecture. Thus, the research classifies these instruments into two groups;
- **First Group** Pertaining to the architectural heritage of Basra, it aims to revive a sense of identity within the modern production of buildings. This group includes the following instruments;
1- Simulation Simulating the traditional architecture through imitating the heritage and historical elements and forms via copying or metaphorization, in order to root these components and their meanings into the collective memory of the local society. (as in sections 3.3.1 – 3.3.2 -6.3.5.3).
2- Abstraction It could be achieved by abstracting the historical and heritage elements or concepts and transforming them into modern forms, which could be achieved by focusing on the outline of these components, as they are able to express traditional meanings in order to link the society with its past and its authenticity. (see sections 2.2.1 – 2.3.1 – 2.8 – 3.3.2.3).
2- Generation It could be achieved by considering the heritage as the main source of the architectural identity, thus generating new elements and forms from it. Therefore, this will result in a harmony between the modern and the traditional buildings. (sections 2.10 – 6.4).
- **Second Group** This group pertains to the global architectural trends and the modern movements and aims at preventing a passive reception of the foreign architectural production and its acritical introduction into the local environment, leading to a decay and deterioration of the city identity. These instruments can be summarised as follows;
1- Filtration It can be achieved through the process of filtration of the global architectural products by classifying them and choosing appropriate architectural elements, forms, relations and materials on the basis of their suitability for the local environment, according to the social culture and the climate of the city of Basra. (see sections 1.2 – 2.3.1 – 6.2.2.3).

2- Adaptability It can be achieved by adopting but also modifying the appropriate elements of the global architecture so as to render them closer to concepts that are already familiar with the local environment, as they already exist in the collective memory of the residents. (as mentioned in sections 2.2.1 – 2.3.1 – 2.5.2.1 – 2.7.1 – 2.8 – 6.2.2.1 – 6.2.3.1 -6.2.5).
3- Interpretation It can be achieved by reinterpreting a number of modern architectural forms and elements by giving to them new meanings tied to those rooted in the collective memory in order to render them familiar to the local people. (see sections 3.3.1.2 – 3.3.1.4 – 3.3.2.3)

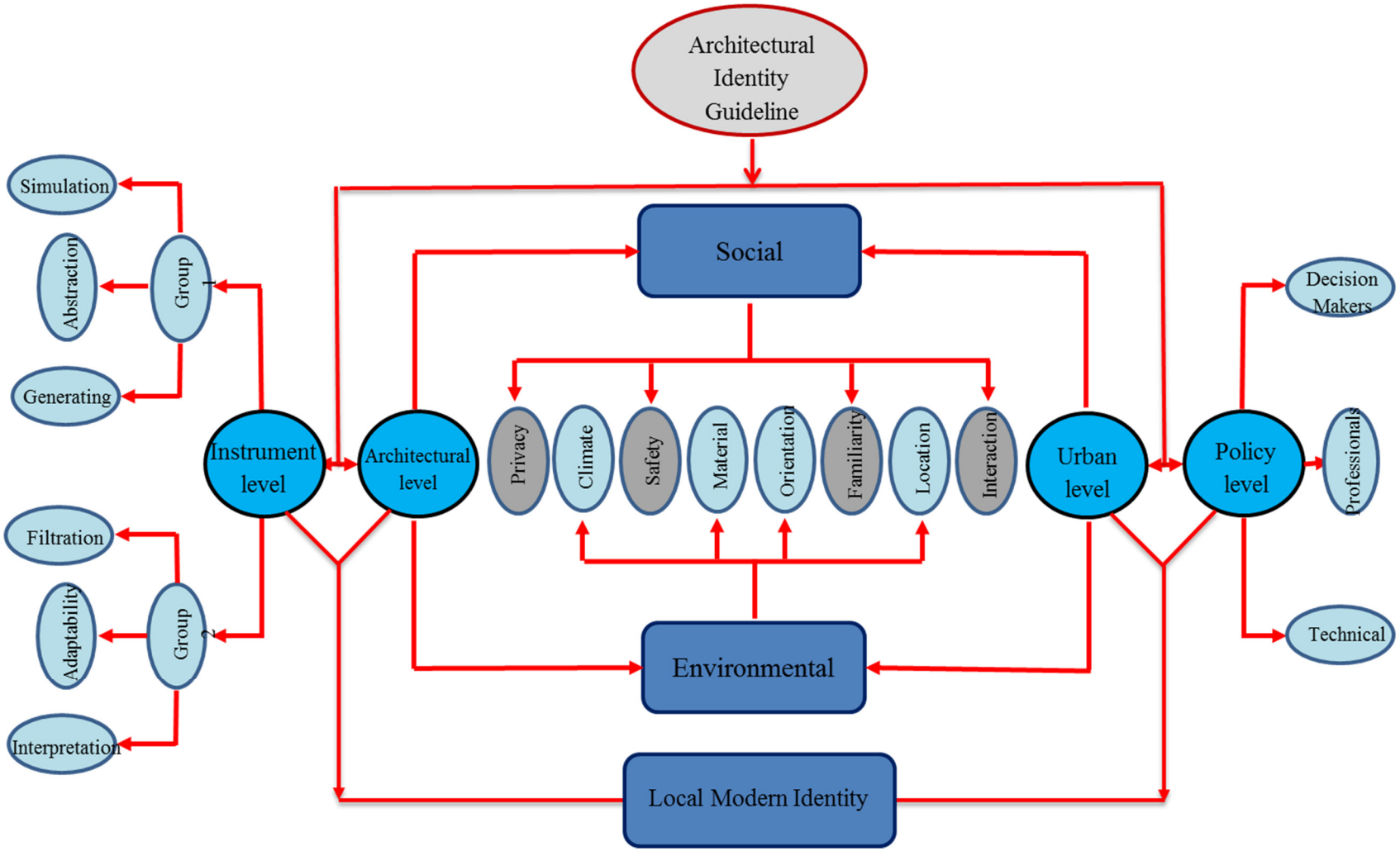


Figure 8-1: Final Guideline

8.5 Contribution to the knowledge

The research could be a considered as a unique study of the issue of Basra architectural identity; it provides better comprehension for the present situation and provides a clear guideline for the future of the city identity. This guideline can use to maintain the architectural identity of the city during the city development process. In addition, the research provides a deep understanding of the positive and negative features of both traditional and contemporary architecture. The main research contribution can be summarised as follows:

- Develop a specific guideline for the city architectural identity, and appropriate to the local environment, culture, and society.
- The study provides a better comprehension of traditional and contemporary architectural identity of Basra city.
- The guideline proposed expected to enable the architects and planners to assess and maintain the city architectural identity in future.
- Regarding the theoretical aspect, the available literature at present could only characterize as a historical, descriptive, and documentary investigation. While this research provides a specific analytical study to devise the characteristics of Basra city identity.
- Improving the social awareness and understanding of the architectural identity of Basra to create a cultural resistance against the identity transformation that would happen according to a foreign ideological impact.

8.6 Limitation of the Research

Due to the subject of the research has a wide range and it related to many issues, so it suffers from several limitations:

- The area of Iraq is large, so the research focuses on the architectural identity of Basra as a part of Iraq, the research focuses on maintaining the city identity in regards social and environmental aspects.
- In terms of period time, the research focuses on Iraqi architectural identity during the 20th century and the transformations that happened in this period.

- There was a lack of literature on Basra's architecture, especially regarding the English sources, which were rare. In addition, most of the available Arabic sources are old. In addition, the translating of literature from Arabic to English may have had some weaknesses.
- The size of the study was limited by the time available for the analysis. Hence, a substantial amount of information developed from this study can use for future research.
- The current security situation in Iraq presents a real challenge for the researcher regarding collecting the data of the field study, in particular the photographs and observation.

8.7 Further studies

- Necessity for studies concentrating on the other dimensions such as economic and political aspects.
- Need for further studies focused on documentation of the traditional buildings in Basra.
- Further studies needed for Investigate the city identity in earlier periods.
- Deeper studies are needed focusing on the impact of the rivers on the city identity.
- It’s important to carry out more studies focus on the influence of demographic change that happened in the city on the identity of Basra.
- Needs for specific studies that focuses on the younger generation and their perception to the architectural identity of the city.

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APPENDIX A: QUESTIONNAIRES FORM

Research Topic: Iraqi Architecture between Tradition and Modernity: Re-creating the Urban Identity of Basra, the "Venice of the East"

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Overview of the Research Study

This survey is based on an ongoing PhD research study. The aim of this research is to develop guidelines for professionals to guide them in producing urban design solutions that considers maintaining identity while enabling modernization.

Questionnaire Survey Instructions

* There are no right or wrong answers to the questions in this survey. Select the most appropriate answer for each question based on your view/experience.

* It is necessary in this study that all questions are answered, as the questionnaire is designed to achieve particular research objectives, and it is hoped not to offend respondents in any way. If there is question(s) that you are unwilling or unable to answer, you may skip to answer it and continue answering the remainder of the questionnaires.

* Remember that both your identity and that of the company you work for will remain strictly confidential.

Part One: Personal Information

Q1- Gender

☐ Male ☐ Female

Q2-Age: ---------- years

Q3- education level ----------

Q4-how long you have been living in Basra?

Part Two: Traditional Architectural Identity

Q5-In your opinion, do you think there is a unique style or Identity for Iraqi architecture?

☐ Yes ☐ No ☐ I don't know

Q6 - If yes, do you think that Basra city reflects this identity?

☐ Yes ☐ No ☐ I don't know

Q7 -In your opinion, which of the following could represent the Iraqi architectural identity?

☐ Human scale in the local architecture

☐ Homogeneity of buildings height

☐ Design style of Alleys

☐ Treatment of external elevations

☐ The existence of an internal courtyard

Part Three: Modern Architectural Identity

Q8 -In your opinion, do you agree that the global architecture has impacted the architecture style on your neighbourhood?

☐ Strongly agree

☐ Agree

☐ I don't know

☐ Disagree

☐ strongly disagree

Q9 -In your opinion, do you think that new building materials are appropriate to Basra climate conditions?

☐ Strongly appropriate

☐ Appropriate

☐ I don't know

☐ No appropriate

☐Strongly not appropriate

Part Four: Comparison between Traditional and Modern Identity

Q10 -How you evaluate your relationship with the neighbours?

☐ Very good

☐ Good

☐ Fair

☐ Weak

☐ Very weak

Q11 - Regarding the design style of roads and streets in your neighbourhood, do you think that it affects you?

☐ Positive affect

☐ Normal affect

☐ I don't know

☐ No affect

☐ Negative affect

Q12 - Regarding your neighbourhood, is there any building or place still in your memory and you feel it connect you with past?

☐ Yes ☐ No ☐ I don't know

Q13 - If yes, please name it_____.

Q14-Regarding privacy, what do you think that it more appropriate?

☐ Traditional style

☐ Modern style

☐ I don't know

Q15 -In your opinion, which style of architecture is more appropriate for Basra climate conditions?

☐ Traditional style

☐ Modern style

☐ I don't know

Q16 -In your opinion, which style of architecture in your city would give more familiarity?

☐ Traditional architecture

☐ Modern architecture

☐ I don't know

Q17 -In your view, which style of marketplace that you think it more attractive for you?

☐ Traditional market

☐ Modern market

☐ I don't know

Q18-Regarding relationship between neighbours, which a neighbourhood design styles you think that have stronger

☐ Traditional neighbourhood

☐ Modern neighbourhood

☐ I don't know

Q19-Which kind of neighbourhoods, in your opinion, provide more safety and security for children

☐ Traditional neighbourhood

☐ Modern neighbourhood

☐ I don’t know

Part Five: The Main Factors Influenced Identity

Q20 - What your evaluation for the privacy level in your neighbourhood?

☐ Strong privacy

☐ Enough privacy

☐ I don’t know

☐ No privacy

☐ Strongly no privacy

Q21 -In your opinion, do you feel a familiarity with the style of architecture in your neighbourhood?

☐ Strong familiarity

☐ Familiar

☐ I don’t know

☐ No familiarity

☐ Strongly no familiarity

Q22 - Do you feel safe in your neighbourhood?

☐ Very safe

☐ Safe

☐ I don’t know

☐ Unsafe

☐ Strongly unsafe

Q23- Do you think that the children areas in your neighbourhood is a safe?

☐ Very safe

☐ Safe

☐ I don’t know

☐ Unsafe

☐ Strongly unsafe

Q24 -Regarding diversity, do you think that the urban landscape in your neighbourhood

☐ Harmonic

☐ Conflicting

☐ Hybrid

Q25- Regarding climate, do you think that the design of your home and neighbourhood appropriate for Basra climate conditions?

☐ Strongly appropriate

☐ Appropriate

☐ I don’t know

☐ Not appropriate

☐ Strongly not appropriate

Q26- Regarding shopping, do you think that the marketplace style in your neighbourhood attractive you?

☐ Strongly attractive

☐ Attractive

☐ I don’t know

☐ Not attractive

☐ Strongly not attractive

Part SIX: The Future for Basra Architectural Identity

Q27- Which of the following could achieve a better architecture style for Iraqi society and its built environment?

☐ Native architects

☐ Foreign architects

☐ A combination of native and foreign architects

Q28-Regarding future development of Basra city, do you think that the design should

☐ Neglect all traditional features

☐ Take the traditional for granted

☐ Selecting the useful from both traditional and modern

APPENDIX B: THE INTERVIEW FORM

Iraqi Architecture between Tradition and Modernity:

Re-creating the Urban Identity of Basra, the "Venice of the East"

Name of the researcher: Hamed Hyab Samir

Name of the Supervisor: Claudia Trillo

1. What are the positive aspects of a modern architectural identity, in your view?
2. What are the negative aspects of a modern architectural identity, in your opinion?
3. Do you think that modern architectural identity is suitable for Basra society?
4. What are the advantages of traditional architectural identity, in your opinion?
5. What are disadvantages of traditional architectural identity, in your opinion?
6. What are the factors which influenced traditional architectural identity of Basra city?
    - Socio-cultural factors
    - Religious factors
    - Climate factors
    - Economic factors
    - Others ……
7. Do you think that building architectural design during the last ten years in Basra city was?
    - Excellent
    - Good
    - Satisfactory
    - Poor

In the case of the above alternative, give reasons:

8. Do you think that modern architectural identity is suitable for Basra society?
    - Yes
    - No

    If yes, give reasons:

    If No, give reasons:

9. Do you think that modern architectural identity in Basra has been influenced by western architecture?
    - Yes
    - No

    If yes, what are such influences?

10. Do you think that new materials used in modern buildings of Basra suitable to maintain the architectural identity of the city?
    - Yes
    - No

    If No, give reasons:

11. Do you have any suggestions in term of future architectural identity of Basra?

Thank you

APPENDIX C: THE PROPOSED GUIDELINES

Iraqi Architecture between Tradition and Modernity:

Re-creating the Urban Identity of Basra,

the "Venice of the East"

The Proposed Guideline

First level المستوى الاول السياسات العامه **1- Policy recommendations**
- Improving awareness for professionals and public officers through clarifying the value for local identity of local architectural heritage and traditional buildings and construction techniques. _ رفع مستوى الوعي بالنسبة للمهنيين والمختصين من خلال توضيح قيمة التراث المحلي والمباني التراثيه والتقنيات البنائيه للهوية المحليه .
- Delivering educational programs with local communities aimed at raising awareness on the value of the historical and heritage areas. _ تهيئة واقامة البرامج التعليميه للمجتماعت المحليه بهدف رفع مستوى الوعي حول قيمة المناطق التراثيه والتاريخيه
- Involving local people in the design and development process pertaining to the preservation of the traditional heritage buildings and sites. _ أشراك السكان المحليين في عملية التطوير والتصميم المتعلقه بالحفاظ على المباني والمواقع التقليديه والتراثيه
- Supporting local people to maintain their traditional houses by awarding financial loans or incentives. _ توفير الدعم للسكان المحليين من اجل الحفاظ على منازلهم التراثيه من خلال منحهم قروض ماليه او حوافز.
- Developing further studies aimed at documenting both the traditional buildings and neighbourhoods (tangible heritage) and the social habits, traditions, lifestyle and behaviours of the local residents (intangible heritage). _ اعداد المزيد من الدراسات التي تهدف الى توثيق المباني والاحياء التراثيه (التراث المادي) وتوثيق العادات الاجتماعيه والتقاليد الشائعه واسلوب الحياة والسلوك الاجتماعي للسكان المحليين (التراث غير المادي)

- Introducing site-specific planning laws and legislations for the city of Basra, alongside the centrally issued norms, which do not always respect the local identity.

_ استحداث قوانين وتشريعات تخطيطيه خاصه مدينة البصره الى جانب التشريعات والمعايير التي تصدر عن الحكومة المركزية في بغداد والتي غالبا ما لا تحترم خصوصية المدينه وهويتها المحلية.

- Reinforcing the fight against illegal constructions, which are damaging the traditional patterns of Basra's heritage, particularly from 2003 onwards.

_تعزيز التصدي لعمليات البناء غير القانونيه والمتجاوزين التي تضر بالانماط التراثيه والتقليديه للمدينه وخاصة تلك التي حدثت بعد عام

- Delivering training for the new craftsmen and builders on the traditional building methods and the use of the traditional materials.

_ تهيئة دورات تدريبيه للحرفيين والبنائين الجدد فيما يتعلق باساليب البناء التقليدية واستخدام المواد التقليديه.

- Delivering specialist training courses for the architects and urban designers regarding the conservation techniques used for the traditional buildings and neighbourhoods.

_ اقامة دورات تدريبيه متخصصه للمعماريين والمصممين الحضريين حول تقنيات الحفاظ المستخدمه في المباني والاحياء التراثيه.

- Facilitating the construction of buildings following the traditional styles by adopting norms respectful of the local identity and by using traditional materials and avoiding the use of unfamiliar materials and forms.

_ التشجيع على اعتماد النمط التقليدي من خلال وضع معايير تحترم الهوية المحليه واستخدام مواد البناء التقليديه وتجنب استخدام المواد والاشكال غير المألوفه.

- Supporting people to adopt the traditional styles in their buildings through incentives such as providing them with land for free or at reduced costs.

_ دعم السكان على اعتماد النمط التقليدي من خلال منح محفزات لهم مثل منح قطع الاراضي مجانا او مقابل سعر مخفض.

- Developing periodical plans, for instance once every five years, drawn by teams of specialists in order to carry out the maintenance and rehabilitation works necessary for the heritage buildings and areas.

_ وضع خطط دوريه ,كل خمس سنوات على سبيل المثال, بواسطة متخصصين من اجل القيام باعمال الصيانه والتأهيل الضروريه للمباني والمناطق التراثيه.

- Activating the role of the Department of Architecture of the University of Basra which should broaden its research scope by focusing on the disciplines and techniques aimed at the protection of the local heritage as well as at the safeguarding and enhancement of the traditional identity.

_ تفعيل دور قسم الهندسة المعمارية في جامعة البصره من خلال توسيع نطاق ابحاثها لتكون مركزه نحو التخصصات والتقنيات التي تصب في حماية التراث المحلي والمحافظه على الهوية التقليديه وتعزيزها.

- Continuing to promote the inclusion of the heritage of the city of Basra city in the World Heritage List.

_ العمل على ادراج التراث المحلي لمدينة البصره ضمن قائمة التراث العالمي.

2- Technical guidelines السياسات التقنيه

- Creating an open data repository on traditional and heritage buildings, also through the support of technical BIM, photography and laser scanning.

_ تشكيل قاعدة بيانات للمباني التراثيه والتقليديه في المدينه وذلك من خلال استخدام التقنيات والبرامج العالميه الحديثه مثل ( )والتصوير الفوتوغرافي والمسح الضوئي.

- Avoiding the adoption of complex visual solutions only aimed at inducing amazement by means of unusual colours, materials or forms.

_ تجنب أعتماد المعالجات البصريه المعقدة او اللجوء الى المفاجأة البصريه بهدف جذب انتباه المتلقي عن طريق استخدام المواد والاشكال والالوان غير المألوفة .

- Pursuing a process of abstraction of the traditional architectural elements through new technology so as to produce forms that are modern albeit retaining cultural depth.

_ تبني الية التجريد للعناصر المعمارية التقليدية وباستخدام التكنولوجيا الحديثه لانتاج اشكال حديثه مع الابقاء على العمق الثقافي.

- Creating new meaning and possibilities of interpretation for the imported architectural forms in order to reduce the contrast between them and the local ones in the recipient's perception.

_ خلق معان وتأويلات جديده للاشكال والعناصر المعمارية المستورده من اجل مساعدة المتلقي على تقليل التنافر والتضاد بينها وبين تلك المحليه

- Creating a cultural filter of local values, traditions and habits intended to be a base for a cultural resistance against the potential threats of an indiscriminate adoption of patterns and features of global architecture.

_ تشكيل مرشح ثقافي اعتمادا على القيم والتقاليد والعادات المحليه ليكون بمثابة الاساس للمقاومه الثقافيه ضد التهديدات المحتمله من التبني العشوائي للانماط والاشكال والافكار العالميه.

- Adopting the superficial treatment as the base for the gradual process of transformation.

_ أعتماد المعالجات السطحيه كأساس لعمليات التحول التي تكون تدريجيه وتاخذ وقتا طويلا.

- Focusing on the flexible elements that have ability to fuse with the modern forms.

_ التأكيد على العناصر المعماريه التراثية المرنه والتي لديها القدرة على الاندماج مع الاشكال الحديثه .

- Encouraging scientific research aimed at improving the local building materials with the help of technologies and applied research so as to render them appropriate for modern buildings.

_ تشجيع البحث العلمي الهادف الى تطوير مواد البناء المحليه بالاستفادة من التكنولوجيا الحديثه والبحوث التطبيقيه لجعلها مناسبه للمباني الحديثه.

Second level – neighbourhood

المستوى الثاني – المحلة السكنيه

2- Social aspect

-الجوانب الاجتماعيه

- **Privacy** **-الخصوصيه**
- Developing standards and determinants to avoid differences between the heights of the buildings, especially within the residential areas, in order to respect the privacy of the residents of the low buildings. - وضع المعايير و المحددات لتجنب الاختلافات بين ارتفاعات المباني ,وخاصة في المناطق السكنيه, من اجل احترام خصوصية السكان في المباني المنخفضه
- Taking into account the placement of the doors and the windows facing on to the alleys of the neighbourhood and avoiding their facing each other in order to prevent the direct sight. - الاخذ بنظر الاعتبار في تصاميم الحي السكني مواقع الابواب والشبابيك والحيلولة دون مواجهة احدهما للاخر بهدف منع الرؤيا المباشره الى داخل البيت
- Preventing the juxtaposition between the residential and the commercial or mixed areas, which leads to a reduction of the level of privacy, increases the level of noise and encourages the circulation of strangers. - منع التجاور بين المناطق السكنيه من جهة والمناطق التجاريه والمختلطه من جهة اخرى حيث انه يؤدي الى خفض مستوى الخصوصيه ويزيد من مستوى الضوضاء ويساعد على اختراق الغرباء للمنطقه السكنيه.
- Preventing strangers to access the neighbourhood by following the traditional pattern of the Iraqi urban fabric whose complexity is familiar to the locals whilst it disorients strangers. - منع دخول الغرباء للمحله السكنيه من خلال اتباع النمط التقليدي التراثي للنسيج الحضري العراقي المعقد والذي هو مألوف وواضح للسكان المحليين بينما يكون مربك للغرباء .
- Putting emphasis on the hierarchy of the spaces within the neighbourhood by clearly distinguishing spaces on the basis of their public, semi-public or private function then placing them according to this hierarchy. - التاكيد على التدرج الهرمي للفضاءات داخل المحله السكنيه من العام الى الخاص,ويمكن تحقيق ذلك من خلال تصنيف الفضاءات اعتمادا على وظيفتها الى فضاء عام وشبه عام وخاص
- Creating a set of courtyards within the neighbourhood to be each of which would serve as a private space for the surrounding houses, whose windows would face onto them. - انشاء مجموعة من الفناءات المفتوحه داخل المحله السكنيه ليكون كل واحد منها بمثابة ساحه مشتركه خاصه للمنازل المحيطة بها , مع امكانية توجيه النوافذ باتجاهها.
- Adopting a system of Cul-De-Sac streets in the residential neighbourhoods in order to reduce the circulation of the strangers within them. - تبني نظام الشوارع مغلقة النهايات داخل الاحياء السكنيه من اجل الحد من حركة الغرباء داخل المناطق السكنيه.
- **Safety** **-الامان**
- Reducing the rate of crimes and raising the level of safety by avoiding the mixed land use. - خفض مستوى الجريمه ورفع مستوى الامان من خلال تجنب الاستعمالات المختلطه .

- Avoiding a high residential density in order to create a safer environment.
- تجنب الكثافات السكنيه العاليه من اجل خلق بيئة امنه.

- Taking advantage of the Cul-De-Sac streets of the neighbourhood as play areas for children since they provide a safe environment in addition to privacy.
- الاستفادة من المزايا الايجابيه للشوارع مغلقة النهايات لاستغلالها كمناطق لعب للاطفال حيث انها توفر بيئة امنه بالاضافة الى توفيرها مستوى عالي من الخصوصيه.

- Separating the circulation of the vehicles from that of the pedestrians which would decrease the number of accidents and creates a safe environment.
- عزل حركة السيارات عن حركة المشاة بهدف تقليل حوادث السير وخلق بيئة امنه.

- Adopting a collective car parking system within the neighbourhood, which would also help to create a safe environment and reduce the risk of accidents.
-اعتماد نظام مواقف السيارات الجماعيه داخل الاحياء السكنية مما يساعد على خلق بيئة امنه والحد من مخاطر الحوادث.

- Adopting the style of the attached house which would provide a high level of security within the residential area.
- أعتماد نمط المباني المتصله حيث انه يوفر مستو عال من الامان داخل الحي السكني.

- Enhancing the legibility of the public space with a design that ensures its security and possibility to be easily controlled.
- التاكيد على الوضوحيه ضمن الفضاءات العامه فيما يتعلق بالتصميم لضمان سهولة السيطرة عليها وتحقيق الامن.

- **Interaction**

-التفاعل الاجتماعي

- Putting emphasis on the attached houses style within the residential area since it promotes the relationships between the neighbours and improves the social interaction.
-التاكيد على نمط المباني المتصله داخل المحله السكنيه لانها تعزز العلاقات بين الجيران وتقوي التفاعل الاجتماعي.

- Creating a social environment, which will enhance the interaction between people by creating an open space that can serve as a core around which the houses gather and the neighbours meet each other, as in a place for social occasions.
- خلق بيئة أجتماعيه من شأنها ان تعزز التفاعل بين السكان من خلال أنشاء فضاءات مفتوحه لتكون بمثابة نواة لتجمع المساكن حيث يمكن للجيران الالتقاء ببعضهم البعض, بلاضافة الى استغلال هذا الفضاء للمناسبات العامه.

- Ensuring the creation of a large number of urban public spaces in order to encourage the contacts between the residents and strengthen social relationships.
- ضمان إنشاء عدد كبير من الأماكن العامة الحضرية لتشجيع الالتقاء بين السكان وتعزيز العلاقات الاجتماعي

- Adopting a collective car parking system which will increase the opportunities for the residents to meet each other, hence increasing social interaction.
- أعتماد نظام مواقف السيارات الجماعيه حيث من شأنه ان يوفر المزيد من فرص الالتقاء للساكنيين مع بعضهم البعض ويرفع مستوى التفاعل الاجتماعي.

- Giving priority to pedestrian pathways more than vehicle ways so as to encourage people to interact with each other.

- أعطاء الاولوية لمسارات المشاة اكثر من طرق المركبات من اجل تشجيع الناس على التفاعل مع بعضهم البعض.

- Minimising the width of the residential land plots and reducing the distance between the doors of the different houses in order to strengthen the social relationships and increase the social interaction, by offering more opportunities for the neighbours to meet each other.

- تقليل واجهات قطع الاراضي السكنيه وتقليل المسافه بين ابواب البيوت المتجاوره مما يؤدي الى تعزيز العلاقات الاجتماعيه وزيادة التفاعل الاجتماعي من خلال توفير المزيد من الفرص للجيران للالتقاء مع بعضهم البعض

- **Familiarity**

-ألالفة

- Adopting references to the local architecture preventing the discontinuity with the traditional identity, and ensuring the connection with the collective memory.

- أعتماد مراجع العمارة المحلية لمنع حدوث الانقطاع مع الهوية التقليدية, وضمان التواصل مع الذاكره الجماعيه للسكان المحليين.

- Rebuilding the demolished heritage buildings regarded as main landmarks of the memory of the city with the previous design and using similar materials, as much as possible, in order to stimulate the collective memory of residents and revive the local identity. (Such as a landmark of Surin clock tower).

- أعادة بناء المباني التراثية المهدمه التي تعتبر جزء من المعالم الرئيسية لذاكرة المدينة بنفس التصميم السابق واستخدام مواد مماثله(قدر الامكان) من اجل تحفيز الذاكرة الجماعية للسكان المحليين وأعادة أحياء الهوية المحلية (ساعة سورين على سبيل المثال).

- Building arcades, especially with columns, as in Arabic traditional cities, so as to create a sense of unity and homogeneity and to reduce the contrast between the disparate designs and materials of the different buildings.

- أعتماد الاروقه في الشوارع وخاصة الاروقه المعمدة كما في المدن التقليدية العربيه , وذلك لخلق شعور بالوحدة والتجانس وتقليل التباين في التصاميم والمواد ضمن المباني المختلفه.

- Paving the paths, alleys and the entire public space, especially within the ancient areas, with the “Fershi" clay tiles of the local traditional architecture.

- تبليط ورصف المسارات والازقه والفضاءات العامه (لا سيما في المناطق التراثيه) باستخدام الكاشي التراثي (الفرشي) الذي يعتبر من سمات العماره التراثيه التقليديه.

- Reshaping the city skyline so that it can reflect its historical identity, rooted in the past, by enhancing the visibility of the religious elements and increasing their pre-eminence over the other buildings.

-التركيز على اعادة تشكيل خط سماء المدينه بحيث يعكس هويتها التاريخيه المتأصله في القدم من خلال أبراز العناصر الدينيه وجعلها مهيمنه على سماء المدينه.

3- Environmental aspect

- الجوانب الاجتماعيه

- **Climate**

- المناخ

- Creating climate and environmental architectural treatments, such as buildings projection or manufactured roofs in order to provide the pedestrians with protection from the harsh climate especially in the summer.

-خلق معالجات معماريه مناخية وبيئية , مثل بروز المباني او السقوف المصنعه من اجل توفير حمايه للمشاة ضمن الازقه من المناخ القاسي وخصوصا في فصل الصيف.

- Avoiding wide and straight streets and roads, especially for the pedestrians, in order to create air circulation against the harsh climate and create a comfortable environment.

- تجنب الشوارع والواسعه والمستقيمه (خاصة فيما يتعلق بالمشاة) من أجل خلق حركه هواء لتلطيف وتشكيل بيئة مريحه خصوصا اثناء المناخ القاسي.

- Adopting a system of arcades for the wider streets in order to create shaded areas for the pedestrians.

- أعتماد نظام الاروقه وخصوصا في الشوارع الواسعة لتشكيل مناطق مظلله للمشاة.

- Reducing, as much as possible, the streets for cars within the residential areas and increasing pedestrian paths to provide a healthy environment devoid of pollution.

- الحد (قدر المستطاع) من شوارع السيارات ضمن المناطق السكنيه , وزيادة مسارات المشاة وذلك لخلق بيئة صحية وخالية من التلوث.

- Adopting the attached house type to provide shadows for the pedestrian pathways.

- تبني نمط المباني المتلاصقه لتوفير مناطق مظلله للمشاة .

- Reducing the width of the streets, as narrow streets are easier to shade.

- تقليل عرض الشوارع (قدر المستطاع) , حيث ان الشوارع الضيقه تكون عملية تظليلها اسهل .

- Developing standards and determinants aimed at avoiding differences between the height of the buildings, especially within the residential areas, to avoid any reduction of ventilation and lighting for the lower buildings.

- وضع معايير ومحددات تهدف لتفادي الفروق في الارتفاعات بين المباني (خصوصا في المناطق السكنيه) لتجنب حجب التهوية والانارة عن المباني المنخفضة.

- **Material**

مواد البناء

- Monitoring and controlling the importation of the building materials, submitting them to checking operations.

- السيطرة ومراقبة عملية استيراد ماد البناء وأخضاعها الى الفحص والتدقيق.

- Developing standards for the quality of the building materials and their suitability for Basra's climate.

- وضع معايير دقيقه ومعتمدة لجودة مواد البناء ومدى ملائمتها لمناخ مدينة البصره.

- Encouraging people to use the local building materials used in traditional buildings to enhance the ties with the past.

- تشجيع الناس لاستخدام مواد البناء المحليه التي كانت تستخدم في المباني التراثيه وذلك لتقوية وتعزيز الروابط مع الماضي.

- Avoiding the use of alucobond in the facades, widespread in Basra, which is unsuitable for its climate and has transformed the urban landscape of the city into a set of metal boxes, very far from the traditional identity

- تجنب استخدام مادة الاليكوبوند في تغليف الواجهات (الشائعه الاستعمال حاليا في المدينه) والتي هي غير ملائمه لمناخ المدينه بلاضافة الى كونها قد حولت المشهد الحضري للمدينه الى مجموعه من الصناديق المعدنيه , ما يجعلها بعيدة كل البعد عن الهوية التقليديه.

- **Orientation**

- التوجيه

- Avoiding a lay out of the pedestrian pathways following the west to east direction and preferring a north to south direction so as to shade them more easily.

- تجنب توقيع مسارات المشاة باتجاه غرب- شرق , حيث يفضل توقيعها باتجاه شمال-جنوب من اجل سهولة عملية تظليلها واعتماد الاتجاه غرب-شرق لشوارع السيارات.

- Recommending to direct the pedestrian pathways according to a north-west to south-east direction, as the prevailing winds in Iraq blow in that direction.

-توقيع مارات المشاة وفقا لاتجاه الشمال الغربي الى الجنوب الشرقي وذلك لكون الرياح السائدة بالعراق طيلة ايام السنه تكون بهذا الاتجاه

- **Location**

- الموقع

- Taking advantage of the rivers system, and restoring the original aspect of Basra, historically dubbed as the “Venice of the East”, as the contact with the waters was a distinctive feature of the city identity.

- أستغلال نظام القنوات المائيه المميز للبصره بهدف أستعادة الاصاله للمدينه والتي كانت تسمى سابقا (فينيسا الشرق) حيث كان العلاقه مع النهر تعتبر هي السمه المميزه لهوية المدينة.

- Developing water-based transportation by profiting from the canals within the urban area, one of the distinguishing component of the city identity.

- تطوير حركة النقل المائي(والذي كان نشطا فيما مضى) لتعزيز هوية وتميز المدينه , وذلك من خلال استغلال القنوات المائيه والانهار في المدينه لهذا الغرض.

Third level – house

- المستوى الثالث (المساكن)

3- Social aspect

الجوانب الاجتماعيه

- **Privacy**

- الخصوصيه

- Avoiding the use of large windows, especially in external facades, since it reduces the level of privacy of the space. - تجنب استخدام النوافذ الكبيره(خصوصا في الواجهات الخارجيه) حيث انها تقلل من مستوى الخصوصيه للساكنين.
- Screening the external windows with wooden parts, as in the traditional *shanasheel,* to prevent the direct sight into the interiors and to provide the families with a higher level of privacy inside the homes. - تغليف النوافذ الخارجيه بالمشبكات الخشبيه (كما كان يستخدم في الشناشيل التقليديه) وذلك لمنع الرؤيا المباشره باتجاه الداخل وتوفير درجه عاليه من الخصوصيه لافراد العائله داخل المنزل.
- Classifying the spaces within the house according to a hierarchy proceeding from the public to the private in order to get more privacy. - أعتماد التسلسل الهرمي لتصنيف الفضاءات داخل المنزل من العام الى الخاص من اجل الحصول على الخصوصيه العاليه.
- Creating an intermediate space, for instance the corridor, between the entrance and the interiors providing the family with higher level of privacy within the house - تشكيل فضاء بيني (مثل المجاز سابقا) ليكون فاصلا بين المدخل وبين الفضاءات الداخليه للمسكن لتحقيق درجه اعلى من الخصوصيه للعائله داخل المنزل.
- Adopting a solution with two entrances; one for the guests and another for the family, to provide the families with a higher level of privacy within the house, preventing the direct sight from the outside. - أعتماد طراز المنزل ذو المدخلين كاحد الحلول لمشكلة الخصوصيه : حيث يكون هناك مدخلا مستقلا للضيوف , في حين يكون هناك مدخل اخر للعائله, مما يساعد على منع الرؤيا المباشره نحو الفضاءات الداخليه للمنزل وتحقيق خصوصيه عاليه.
- **Safety** **- الامان**
- Minimising the size of the windows and reducing their number in the facades, hence raising the level of security. - تصغير مساحة الشبابيك وتقليل عددها في الواجهه من اجل تحقيق مستوى عال من الامان.
- Benefiting from the typology of the courtyard to create a private and safe zone within the house that can also serve as a play area for children. - استغلال نمط الفناء الداخلي لتشكيل منطقه خاصه وأمنه داخل المنزل حيث يمكن استغلالها كمنطقه لعب للاطفال.
- **Familiarity** **- الألفة**
- Encouraging people to build shanasheel on their modern facades, not only for ornamental or symbolic reasons but also for its functional and environmental importance, also using non- traditional materials and technologies. - تشجيع الناس على أعتماد الشناشيل في واجهات مساكنهم الحديثه(ليس فقط كظاهره شكلية او رمزيه) بل استغلالها وظيفيا وبيئيا مع أمكانية الاستفادة من التكنولوجيا والمواد الحديثه في بنائها.

- **2- Environmental aspects**

- الجوانب البيئيه

- **Climate**

-المناخ

- Encouraging people to recreate courtyards so as to provide the houses with a climatically comfortable environment during the summer whilst adopting mechanical solutions to avoid possible problems related to the winter (for instance, pertaining to rain drainage).

- تشجيع الناس على أحياء الفناء الداخلي في مساكنهم من اجل خلق بيئه داخليه مريحه مناخيا خلال فصل الصيف والاسنفادة من الحلول التكنولوجيه الحديثه لتجنب المشاكل المحتمله كالتي تحدث في حالة المطر في فصل الشتاء.

- Benefiting from the natural ventilation system to create an air flow within the house and to avoid the use of technology for its climate control.

- الاستفادة من نظام التهوية الطبيعية لتحريك الهواء داخل المنزل وتجنب الاعتماد على التكنولوجيا (قدر الامكان) في المعالجات المناخيه

- **Material**

- مواد البناء

- Encouraging people to use wood the rather than iron or aluminium for the doors and the windows of the facades, as it reconnects modern buildings to the traditional ones.

- تشجيع الناس على اعادة استعمال الخشب كمادة لصناعه الابواب والشبابيك بدلا من الحديد والالمنيوم (خصوصا في الواجهات الخارجيه) وذلك لدورها في ربط المباني الحديثه مع المباني التراثيه.

- **Fourth; The instruments**

- رابعا (الآليات)

- In order to achieve a new sense of identity for the city of Basra, there is a need to identify instruments which could help architects and professionals to fill the gap between modern and traditional architecture.

Thus, the research classifies these instruments in two groups;

- من اجل تحقيق حس جديد للهويه المعماريه لمدينة البصره, فأن هناك حاجة ماسة لتحديد الاليات التي يمكن ان تساعد المعماريين والمهنيين لردم الفجوه بين العمارة الحديثه العالميه والعماره المحليه التقليديه.

عليه, يصنف البحث هذه الاليات الى مجموعتين

- **First group**

- Pertaining to the architectural heritage of Basra, it aims to revive a sense of identity within the modern production of buildings. This group includes the following instruments;

-المجموعة الاولى

هذه المجموعة تتعامل مع التراث المعماري للبصره وتهدف الى أحياء الشعور بالهويه ضمن الانتاج الحديث للمباني . وتتضمن هذه المجموعه ثلاث أليات هي

1- Simulation

- Simulating the traditional architecture through imitating the heritage and historical elements and forms via copying or metaphorization, in order to root these components and their meanings into the collective memory of the local society.

1-المحاكاة

-اي محاكاة العمارة التراثيه من خلال تقليد العناصر والاشكال التاريخيه والتراثيه عبر النسخ او الاستعاره من اجل تأصيل هذه المكونات ومعانيها في الذاكرة الجماعيه للمجتمع المحلي.

2- Abstraction

- It could be achieved by abstracting the historical and heritage elements or concepts and transforming them into modern forms, which could be achieved by focusing on the outline of these components, as they are able to express traditional meanings in order to link the society with its past and its authenticity.

2-التجريد

ويقصد به تجريد العناصر والافكار التاريخيه والتراثيه وتضمينها ضمن اشكال حديثه وذلك من خلال التاكيد على الخطوط الاساسيه لهذه العناصر او المكونات وذلك لقدرتها على عكس المعاني التراثيه التي لها القدرة على التعبير عن اصاله المجتمع واتصاله مع الماضي.

3- Generation

- It could be achieved by considering the heritage as the main source of the architectural identity, thus generating new elements and forms from it. Therefore, this will result in a harmony between the modern and the traditional buildings.

-التوليد

يتحقق من خلال اعتبار التراث مصدرا اساسيا للهوية المعماريه وبالتالي فان توليد عناصر واشكال وافكار جديده منه سيؤدي الى حالة من الانسجام بين الحديث والتراثي.

- **Second group**

- This group pertains to the global architectural trends and the modern movements and aims at preventing a passive reception of the foreign architectural production and its acritical introduction into the local environment, leading to a decay and deterioration of the city identity.

These instruments can be summarised as follows;

-المجموعة الثانية

هذه المجموعة تتعامل مع التيارات المعماريه العالميه والحركات الحديثه وتهدف الى تجنب ورفض التلقي السلبي للعماره الاجنبيه العالميه وتبنيها ضمن البيئه المحليه مما يؤدي الى تلاشي وضياع هوية المدينة.

ويمكن تلخيص هذه الاليات الى ثلاثه هي

3- Filtration

- It can be achieved through the process of filtration of the global architectural products by classifying them and choosing appropriate architectural elements, forms, relations and materials on the basis of their suitability for the local environment, according to the social culture and the climate of the city of Basra.

1-الترشيح

ويقصد به القيام بعملية ترشيح للمنتج المعماري العالمي وذلك من خلال تصنيفها وغربلتها واختيار العناصر والاشكال والافكار والعلاقات والمواد المناسبه اعتمادا على ملائمتها للبيئه المحلية من الجوانب الاجتماعيه الثقافيه والمناخيه لمدينة البصره.

2- Adaptability

- It can be achieved by adopting but also modifying the appropriate elements of the global architecture so as to render them closer to concepts that are already familiar with the local environment, as they already exist in the collective memory of the residents.

2-التبني

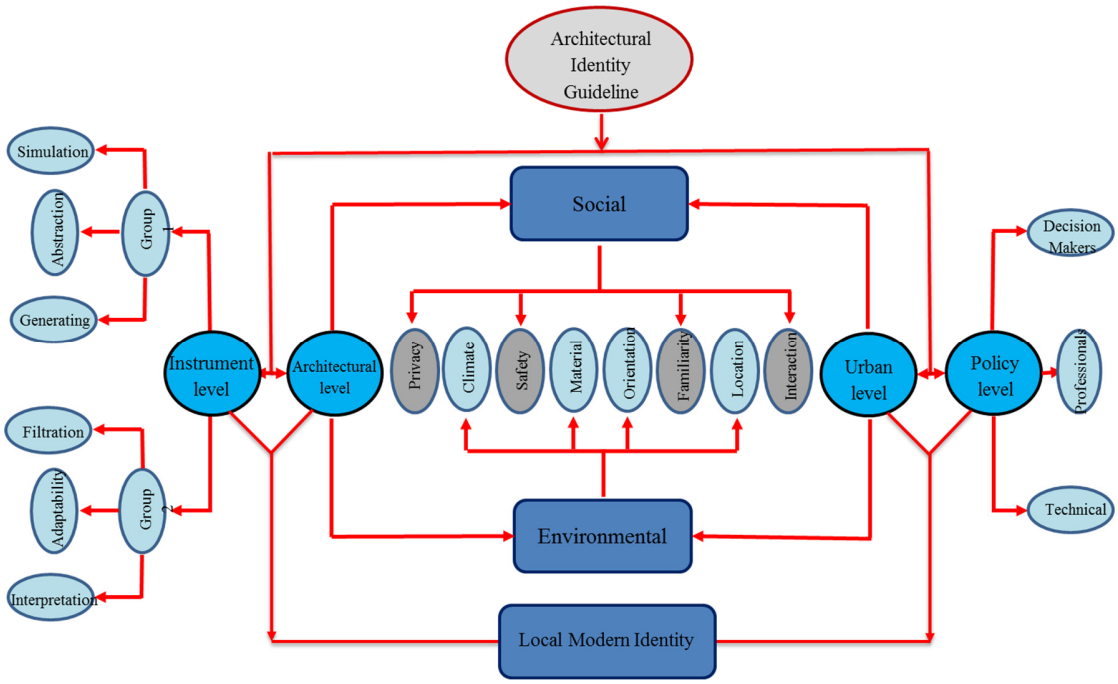
ويمكن تحقيقه من خلال تبني بعض العناصر والاشكال المعمارية العالميه المناسبه وتعديلها لجعلها قريبه من المفاهيم والافكار المعروفه محليا والتي هي موجودة بالفعل في الذاكرة الجماعية للسكان المحليين.

3- Interpretation

- It can be achieved by reinterpreting a number of modern architectural forms and elements by giving to them new meanings tied to those rooted in the collective memory in order to render them familiar to the local people.

3-التأويل

حيث يمكن تحقيقه من خلال أعادة تفسير وتأويل عدد من الاشكال والعناصر المعمارية الحديثه من خلال منحها معان جديدة مرتبطه بتلك المعاني المتأصله في الذاكره الجماعيه بهدف جعلها مألوفة من فبل السكان المحليين .


Architectural Identity Guideline
Social
Environmental
Local Modern Identity
Instrument level
Architectural level
Urban level
Policy level
Simulation
Abstraction
Group
Generating
Filtration
Adaptability
Group
Interpretation
Privacy
Climate
Safety
Material
Orientation
Familiarity
Location
Interaction
Decision Makers
Professionals
Technical